DOCUMENT RESUME

ED 134 843 08 CE 010 140

AUTHOR	Jackson, Frances
TITLE	An Exemplary Career Education Program in the Great Falls Public Schools (K-14). Final Report.
INSTITUTION	Great Falls Public Schools, Mont.
SPONS AGENCY	Bureau of Adult, Vocational, and Technical Education (DHEW/OE), Washington, D.C.
REPORT NO	CAN-2081600
BUREAU NO	502A850002A
PUB DATE	30 Jun 76
GRANT	OEG-381-75-0006
NOTE	360p.; For a related document see CE 010 139
EDRS PRICE	MF-$0.83 HC-$19.41 Plus Postage.
DESCRIPTORS	*Career Awareness; Career Choice; *Career Education; *Career Exploration; Curriculum Development; Educational Assessment; Educational Objectives; Elementary Secondary Education; *Information Utilization; Program Descriptions; *Program Development; Program Effectiveness; Program Evaluation; School Community Cooperation; School Districts; *Staff Improvement; Statistical Analysis; Tables (Data); Vocational Development; Work Experience Programs
IDENTIFIERS	*Montana; Montana (Great Falls)

ABSTRACT

Description, data, and conclusions are presented for a 3-year career education project in the Great Falls Public Schools (Montana) which focused on the systematic development of components which would be transportable and operationally effective. Major developmental emphases of the project are noted and include staff training, curriculum revision and guides, identification, acquisition and distribution of appropriate instructional resources, career information centers, a community resource center, and coordination of services to provide for various forms of work experience. Achievements of the project in each major goal area are summarized. Conclusions presented indicate that as a result of the project, career education has become a significant facet of public school programs in the school district and has had an important role in enhancing educational processes. Appendix A contains the 1975-76 evaluation design and the forms used. Appendix B contains an action inventory, and appendix C contains edited interim reports for 1973-74 and 1975-76. (TA)

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ED134843

FINAL REPORT

Project No. 502A850002A
Grant No. G 381-75-0006

CAN No. 2081600

An Exemplary Career Education Program in the Great Falls Public Schools (K-14)

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

The project reported herein was performed pursuant to a contract with the Bureau of Adult, Vocational and Technical Education, Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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June 30, 1976

CE 010 140

REPORTING PERIOD

This reporting period extends from
July 1, 1973 to June 30, 1976

Signature of Project Director

Date

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PREFACE

The development of a Career Education program has been a challenging and rewarding experience. Materials, guidelines and advice provided by the United States Office of Education, Regional Program Officers and Dr. Kenneth Hoyt have been invaluable to the project staff.

A special thanks is in order for Dr. Frank G. Nelson, Educational Management Corporation (Bend, Oregon). His experience and expertise in management practices and evaluation techniques, as well as his reporting skill, have provided the technical assistance so vitally necessary for successful implementation.

Frances Jackson
Project Director

* *

SUMMARY OF THE REPORT

* *

A. TIME PERIOD COVERED

July 1, 1973 through June 30, 1976

B. GOALS AND RESULTS

During the three year history of the project the primary focus for project activities has been systematic development of components which would satisfy requirements for "transportability" and operational effectiveness. These processes were confounded, sometimes significantly, by changing emphases of the project sponsor and the school district.

A model to guide the total effort was conceptualized during the first year and revised as necessary during subsequent years. It has provided a means to plan continuing activities of the project and, at this point, may also serve as the basis for planning new career education programs.

Perhaps the most difficult problem encountered has been identification of those strategies which could have the greatest effect upon integration of a career education philosophy. This problem is the result of conflicting values, close budgets and the general question of which emphases within a school district will prove most valuable for students. The problem is not idiosyncratic to this project.

Despite this problem, the level of career awareness among the professional staff of the district has been greatly enhanced by project activities. Evidence to support this conclusion was found in the school district annual report, in curriculum changes, in topics of conversation among staff, and in many other areas. This information is perhaps the most significant to emerge as it indicates that teachers are not only able to integrate career education concepts, but they are also willing to integrate such strategies. Historically, staff willingness to adopt new ideas and procedures has been the most significant constraint to diffusion of an innovation.

Major developmental emphases of the project have been:

1. Staff training;
2. Curriculum revision and guides;
3. Identification, acquisition and distribution of appropriate instructional resources;
4. Career Information Centers;
5. Community Resource Center; and
6. Coordination of services to provide for various forms of work experience.

The typical problems encountered in treatment delineation within a public school setting were manifest throughout the program. Given these classical shortcomings, several significant findings were observed. Achievements of the project in each major goal area are summarized below:

1. Student Outcomes: Treatments which had a significant effect are listed below:

    a. Self-Awareness

        -Barclay Classroom Climate Inventory
        -D.A.T. Career Planning Program

    b. Work Awareness

        -Curriculum Infusion
        -Community resources
        -Counselor intervention
        -Special test interpretation (such as O.V.I.S.)
        -Use of Career Information Centers
        -Cooperative Work Program
        -Student maturation

    c. Career Decision-Making Competence

        -Special instructional units and courses
        -Work Experience Program
        -Various combinations of treatments

2. Placement: Important changes in the district placement program included additional supervisory staff, an increase in the number of placement options available to students, and changes in criteria used to provide students with work exploration opportunities. This latter appears especially significant as the changes have been from criteria such as grades, attendance and completion of pre-requisite courses to criteria such as career goals, student interests, and availability of appropriate sites.

    Problems still to be resolved are the number of working students not enrolled in a school sponsored program and coordination of services available to students upon leaving high school. Tentative solutions have been designed and will likely be implemented in the near future.

3. Counseling: The skill which counselors manifest in using data for making decisions was clearly evident in changes made in the career testing and counseling program. Several tests were dropped, and others used more extensively, as data from evaluation processes clarified their usefulness.

The role of counselors in a career education program remains somewhat ambiguous. The problem appears to be related to history and traditions rather than counselor willingness or ability. This will be a difficult problem to resolve.

4. Curriculum: While changes in relation to this goal are the most difficult to measure, general observations would support the significance of project efforts. Most noticeable is the frequency of career-related activities in annual reports and changes or modifications to curriculum guides. This suggests that teachers, and others, have accepted the importance of career education and are working toward full integration of the concept. Given this willingness to implement the concept, continued work is a relatively simple matter of providing teachers with appropriate information, materials, and training.

5. Career Education Support: The project staff participated in a broad range of activities which contributed to the overall effect of the project. These do not, generally, have a terminal point in the development effort, as emergent products will continually be revised, expanded or adapted to changing conditions within the district.

   Included among these types of activities were:

   a. Installation and use of Career Information Centers;

   b. Implementation of a Community Resource Center;

   c. Addition of courses to the curriculum

   d. Improvements in the cooperative work and work experience programs;

   e. Staff development;

   f. Model development;

   g. Strategies to facilitate student internalization of career concepts; and

   h. Studies of student career patterns.

* * * * * * * * * * * * * * * * * * *

BODY OF THE REPORT

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A. DESCRIPTION OF THE PROJECT

1. Program Overview

History. In July 1973, the Great Falls Public Schools were awarded a grant under Part D of the Vocational Education Act to design and implement an exemplary program in career education. The intent of this program has been to integrate the combined efforts of local people, staff from the State University system, staff of the State Department of Education, and others, which would culminate in a demonstration program available for observation and/or adaptation by school districts throughout the State of Montana.

One of the primary intents of the project has been to establish a career awareness curriculum in the elementary and secondary schools that provides all students with a broad range of options in the world of careers. The project has attempted to stimulate development of each student's aspirations and to provide him or her with the ability to make wise career decisions when he or she is ready.

The project was conceptualized as being comprehensive in nature and sweeping in scope. Because of the charge to develop an exemplary program, it has addressed a variety of issues and developmental activities during its three-year history.

The Project Service Area. The City of Great Falls is located immediately east of the Rocky Mountains and generally in the central portion of the state on a north-south axis. The 1970 census showed the city to have a population of 60,091 residents and the county a population of 81,804. Located within the city are a diverse range of major industrial, transportation and service companies. These include the Anaconda Company, Montana Deaconess Hospital, the Burlington Northern Railroad, Columbus Hospital, Mountain Bell Telephone Company, and the Great Falls Tribune. Great Falls is also a center of government activity with over 5,000 state and federal government employees working within the city.

There are 781 retail business establishments located within the city of Great Falls. These firms employed (in 1971) 3,383 persons, with a total retail sales (in 1971) of over 176 million dollars. There are 142 wholesale business activities in the city which employ nearly 1,400 persons. Wholesale sales (in 1971) exceeded 195 million dollars.

The Great Falls Public School system includes 21 elementary schools, 4 junior high schools and 2 senior high schools. In 1975-76, the elementary schools (K-6) had a total enrollment of 8,316 students, junior high schools (7-9) had an enrollment of 4,435 students, and senior high schools (10-12) enrolled 4,361 students. Included within the public school system is a Vocational Technical School which enrolled 306 students during this academic year.

The Great Falls Public School system has an excellent support capability, as manifest in the number of specialists employed by the district. For example, elementary schools specialists are employed in such diverse areas as library, art, instrumental and vocal music, physical education, and environmental education. General support for the district is manifest in capabilities such as school psychologists, physical education specialists and family counselors.

Expected Outcomes. General classes of student oucomes expected as a result of project activities have included:

1. Increased student awareness of the broad range of options in the world of careers;
2. A reduction in school drop-outs;
3. An increase in vocational guidance services;
4. More realistic career choices by students;
5. Greater perceived relevance in the school curriculum;
6. An increase in educational and job placement; and
7. Total involvement by both teachers and administrators in career education.

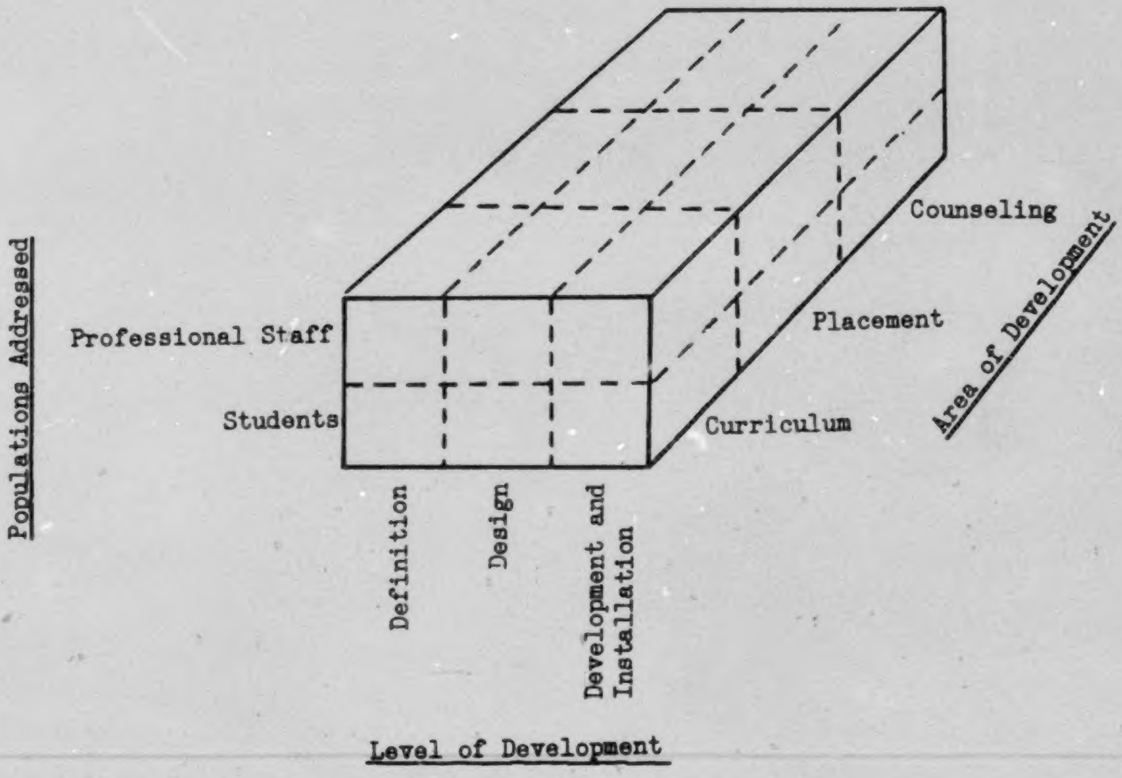
2. Structure and Organization

Historically, career education has not existed as a discrete, mutually exclusive, entity. Rather it represents a philosophy of education which should ultimately permeate the entire educational structure of a given institution. Obviously, this factor poses special problems for a "project" devoted to the development of such a philosophy within a school district. It requires the support of all echelons of administration, instructional and support staff if the desired goal is to obtain.

Because of the pervasive nature of career education, it was necessary during the first year to develop a conceptual structure which would enable the project staff to identify specific tasks and to subsequently prioritize those tasks for effecient management of the project. The model developed for this purpose is shown in Figure 1.

FIGURE 1

CONCEPTUAL STRUCTURE OF THE PROJECT



This model has served to concomitantly organize and integrate the primary foci of career education and development of operational programs. The three major dimensions shown are levels of development, areas of development and populations of concern.

Additionally, there has also existed an historical ambiguity in the definition of elements included within the broader concept of career education. For example, confusion has existed in the definitions of self-awareness, familiarization, program activities, outcome areas, treatments, work values, etc. Consequently, project staff traced these elements through the literature and assigned specific definitions to each of the major concept elements. These were subsequently ordered into the model shown in Figure 2. The elements, including a complete listing of treatments, are shown in outline form in Table 1.

FIGURE 2

PROGRAM STRUCTURE

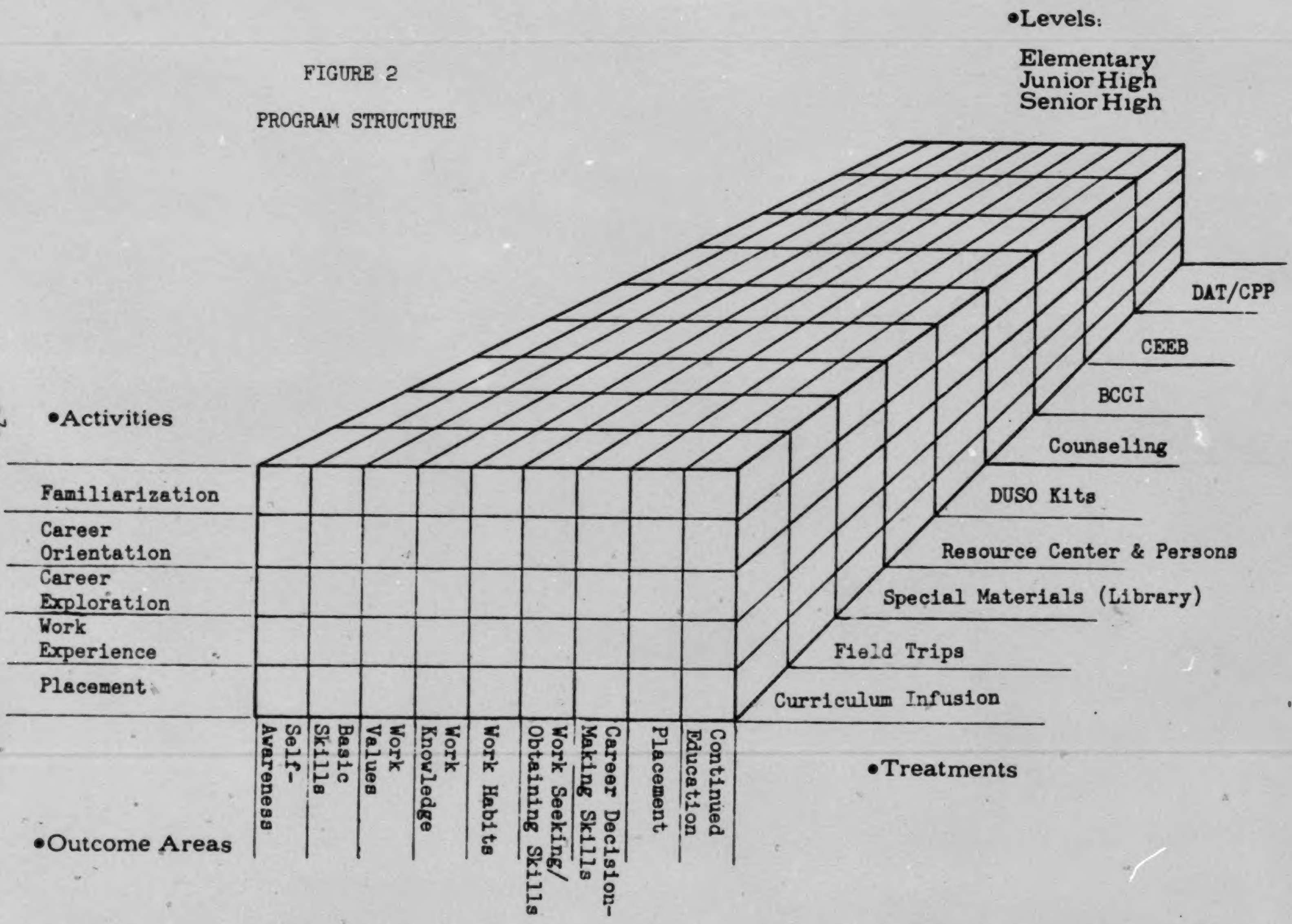


TABLE 1

PROGRAM ELEMENTS

A. Outcome Areas

1. Self-Awareness
2. Basic Skills
3. Work Values
4. Work Knowledge
5. Career Decision-Making Skills
6. Work Habits
7. Work Seeking/Obtaining Skills
8. Placement
9. Continued Education

B. Activities

1. Familiarization
2. Career Orientation
3. Career Exploration
4. Work Experience
5. Placement

C. Treatment

1. Curriculum Infusion
2. Field Trips
3. Special Materials
4. Resource Centers
5. Counselor Activities
6. Career Information Centers
7. Placement and Follow-up
8. D.U.S.O.
9. Resource Persons
10. B.C.C.I.
11. Library Study
12. D.A.T./C.P.P.
13. C.E.Q.
14. ATS-6 (Satellite Technology)
15. World of Construction
16. C.E.E.B./Decision and Outcome
17. O.V.I.S. & C.I.C.
18. G.A.T.B. & I.C.L.
19. Career Math
20. Work Observation
21. Work Experience
22. Vocational Education Courses
23. Placement Procedures
24. Job Seeking Program
25. Military Cluster
26. Consumer Economics

3. Program Goals

The conceptual structures and definition procedures employed during the early history of the project have proven useful to identify specific objectives and tasks to be completed. In this sense, they have also proven useful by improving management efficiency.

General goals established during the first year of the program have been largely retained. They are:

1. Placement: To develop a program which facilitates satisfactory placement of students in either employment, education or training which permits the pursuit of a career choice or meets a real or perceived economic need.

2. Curriculum To facilitate integration of career education concepts into the curriculum such that each student may systematically develop those skills that enable him or her to function in the defined life roles including, but not limited to, citizenship, family, economic, and avocational.

3. Counseling: To develop and implement procedures that enable students to explore and understand their unique characteristics and how these characteristics relate to the defined life roles (citizenship, family, avocational, economic).

4. Management: To develop procedures for planning, organizing, directing, and controlling staff, project, district, and community resources to insure the adoption of project goals within the district and to facilitate transportability of the model.

Operational definitions for these goals were manifest in sets of objectives derived from each. These objectives served to structure project activities including the generation of those data which would facilitate derivation of new objectives and revision of project operations.

The complete listing of specific objectives employed by the project is presented below:

1. Placement

   1.1. To insure that each student has available to him or her those services which can be used to facilitate finding satisfaction in employment upon leaving school

1.2. To insure that each student has available to him or her those services and information which can be used to facilitate making a decision concerning further education or training

1.3. To provide a service to coordinate available job openings with various work programs and those students who desire part-time employment

1.4. To identify and use resources of people, agencies, facilities, and materials located within the community

1.5. To design and implement a mechanism which coordinates utilization of community resources and maximizes their contribution to specified project needs

2. Curriculum

2.1. To develop in each student positive attitudes toward career education concepts including the following constructs:

Personal significance of productive work
Social significance of productive work
Family
Avocational
Citizenship
Economic

2.2. To insure that each student develops the knowledge base and experiential repertoire that would enable him or her to make a satisfactory career choice upon completion of grade twelve

2.3. To insure that each student is aware of the broad range of career options open to him or her in the world of work

2.4. To provide each student with the skills necessary to continually re-assess his or her career choice

2.5. To insure that each student perceives his or her studies as relevant to career interests

2.6. To insure that each student is able to employ the career cluster concept as the unifying element of his or her school experience

2.7. To insure that each student is able to participate in those school and/or community experiences which assist him or her in identifying and evaluating his or her own interests, abilities and values

2.8. To insure that each student has the opportunity for detailed "exploration" of at least three career clusters of his or her choice

2.9. To insure that each student is provided with an opportunity for in-depth exploration of at least one career cluster

2.10. Each student will be provided with the opportunity for "specialized" preparation in a selected career cluster

3. Counseling

3.1. To insure that each student is able to acquire self-awareness of innate and acquired abilities, preferences and potentials

3.2. To insure that each student possesses the requisite skills to relate acquired self-awareness to making career decisions

3.3. To insure that each student has available to him or her information about defined roles (citizenship, family, avocational, and economic)

3.4. To insure that each student has available to him or her the counseling services necessary to make curricular choices in school and educational and occupational choices when leaving school

3.5. To design and implement a mechanism which enables students to up-date, or revise, decisions made relative to selection of cluster study activities

4. Management

4.1. To effect close, continued involvement of private and parochial schools in all aspects of project operations

4.2. To insure comprehensive and useful evaluation of the project by selection and employment of a project evaluation specialist

4.3. To integrate relevant aspects of existing special programs into a career education curriculum

4.4. To maximize cooperation and coordination between the project and the District Special Education Department

4.5. To define, for purposes of this project, students whose career education needs may be classified as "special"

4.6. To design and implement project components which will satisfy idiosyncractic needs of students with unique learning abilities, physical handicaps or emotional disorders

4.7. To establish an Advisory Council which can assist the project in developing its use of community resources

4.8. To define those roles for teachers, administrators and specialists which will best satisfy the goals of career education

4.9. To employ a strategy of on-site visitation by key staff for purposes of effecting diffusion and integration of key career education elements

4.10. To design and conduct necessary studies for purposes of identifying staff needs related to knowledge of career education and integration of career education concepts into the curriculum

4.11. To design and conduct those in-service and/or graduate college programs which will satisfy identified teacher needs in career education

B. MAJOR ACTIVITIES

Introduction

The original proposal under which this program was funded provided only a listing of fourteen elements which could be included in a career education program. It did not outline a rationale for an "exemplary" program nor were procedures described which could be used to derive such criteria.

Consequently, one of the initial activities of the project staff was establishment of goals which more accurately described the desired outcomes from the development effort and which would ensure that specified student outcomes would obtain. An included activity was identification of existent policy, legal requirements and other constraints to program development.

Areas of concentration selected for project development were those named in the conceptual structure presented earlier. These were derived from a careful analysis of the intent of the original proposal, relevant policies of the school district and capabilities of district and project staff.

While it would be desirable to approach design, development and installation of a new program in a linear fashion, this is typically not possible in the context of an operational school district. Instead, new programs must be treated as a limited synergism and, in accordance with general system theory, the interaction between components of the new program and the proposed operational setting must be systematically addressed. Consequently, when working in the definition phase, it was also necessary to address implementation. In the absence of such planning and definition, it is likely that teachers and others would be unable or unwilling to use products developed.

To facilitate the level of detail necessary in planning project activities, a project management worksheet was developed. This procedure, and associated documents, provided a means for the staff to identify included tasks in each project objective and to subsequently order those tasks to maximize development and implementation efficiency. An example of these worksheets is shown in Figure 3.

FIGURE 3

EXAMPLES OF PROJECT MANAGEMENT WORKSHEETS

GOAL NUMBER: I (Placement)

PROJECT MANAGEMENT WORKSHEET

Primary Objective: To insure that each student has available to him those services which can be used to facilitate
(Number: 1) his finding satisfaction in employment upon leaving school.

Subordinate Objective: To design a public relation program to encourage potential employers and employment
(Number: 1) agencies to hire students upon their leaving school.

Task ID Code				Task Sequence	Task Description	Rationale		Criterion for Completion	Task Schedule	
P	A	S	T			Purpose	Prereq. Tasks		Respon. Person	Compl. Date
I	/	/	/		Form a committee on placement to review activities for recommendation	overall dire. to follow		Formation of committee	Weaver	
					Contact State employment service	inform them of C.E. program		visitation	Weaver	

GOAL NUMBER: II (Counselling)

PROJECT MANAGEMENT WORKSHEET

Primary Objective: To insure that each student is able to acquire self-awareness of innate and acquired abilities,
(Number: 1) capabilities, prefeeences, and potentials.

Subordinate Objective: Counselors will assist in the development of pilot programs using new instruments and/or
(Number: 2) tests.

Task ID Code				Task Sequence	Task Description	Rationale		Criterion for Completion	Task Schedule	
P	A	S	T			Purpose	Prereq. Tasks		Respon. Person	Compl. Date
					Arrange use of ACT in each H.S. by selected students	Determine usefulness				
					Counselors meet with representative of test comm.	To suggest possible tests				

GOAL NUMBER: III (Management)

PROJECT MANAGEMENT WORKSHEET

Primary Objective: To effect close, continued involvement of private and parochial schools in all aspects of project
(Number: 1) operations.

Subordinate Objective: Arrange for inclusion of staff and students of private and parochial schools in District
(Number: 1) activities.

Task ID Code				Task Sequence	Task Description	Rationale		Criterion for Completion	Task Schedule	
P	A	S	T			Purpose	Prereq. Tasks		Respon. Person	Compl. Date
					Include staff in Adv. Council and special committees					
					Explore cooperative planning at East and L&C schools with D & B school					

GOAL NUMBER: IV (Curriculum)

PROJECT MANAGEMENT WORKSHEET

Primary Objective: To develop in each student positive attitudes toward Career Education concepts, including:
(Number: 1) personal significance of productive work; social significance of productive work; and roles in family, citizenship, and economic systems.'

Subordinate Objective: Operationally define attitudinal constructs for measurement purposes.
(Number: 2)

Task ID Code				Task Sequence	Task Description	Rationale		Criterion for Completion	Task Schedule	
P	A	S	T			Purpose	Prereq. Tasks		Respon. Person	Compl. Date
					Define procedure for establishing attitude constructs to be measured					
					Critique definitions developed					

Activities pursued throughout the three-year history of the project were generally consistent with the conceptual model. Major emphasis in each goal area, for each year of the project, are summarized below.

1. Placement

Year One. A placement committee was organized which included representatives from the school service staff such as counselors, the academic disciplines and the business/labor/government community. Included in this latter group were persons from the Montana Employment Security office, labor union representatives and staff from private placement agencies. The major emphasis in committee work was development of procedures for job placement which satisfied legal requirements and labor practices. Additionally, development of out-of-school learning experiences was initiated.

Year Two. Early work by project staff had revealed that local placement services were sorely lacking in coordination of their services. The resulting confusion for young people appeared to have an inhibiting effect on placement success. Consequently, the primary objective became one of consolidating the efforts of various placement agencies.

Plans were also developed in conjunction with high school administrators for a program in agribusiness which would increase work experience opportunities within the cooperative programs and which would also include development of several important career skills.

Year Three. Problems associated with lack of placement coordination, and the resultant loss of placement effectiveness, were only partially resolved during the first two years of the project. During the final year of the project, an "awareness" program was initiated to obtain wider participation in efforts to resolve the problems. For example, one study revealed that over 400 students were employed in various locations, but were not enrolled in any form of work program. In the absence of counseling and/or supervision, most of these students were working at jobs totally unrelated to their career goals or they had not considered work in relation to career goals.

The "awareness" program was quite successful with many more persons - both school and community - becoming sensitive to the problem. Solution strategies have not yet been designed.

2. Curriculum Development

Year One. Cross-grade level and inter-disciplinary planning were initiated through regular meetings of the Secondary and Elementary Curriculum Committees and the graduate in-service program. District curriculum specialists were included as necessary and timely.

Year Two. At the elementary level, efforts were continued to identify areas within the existing curriculum for logical insertion of career education concepts. Emphasis was placed on adoption of a career-related basal reading program and improving career content of social science units. Also continued throughout the year was an evaluation program of both print and non-print materials. This latter was included within a larger program of materials identification and acquisition. Finally, a new kindergarten curriculum guide with an emphasis on self-awareness was piloted and revised for final publication.

At the secondary level, interested teachers were encouraged and assisted by project staff to incorporate elements of career education. A survey was conducted to determine the extent to which career education concepts are manifest in the current curriculum. This study was used to determine areas in which developmental efforts would focus in the final year of the project.

One of the most valuable activities completed was development of a Community Resource Center for use at both elementary and secondary levels. Teacher evaluation of the Community Resource Center was overwhelmingly positive.

Year Three. In keeping with the plan for program development, emphasis during the third year was upon improving operational procedures, budgets, and development of necessary policies to institutionalize program products. Included products were the Community Resource Center; new curriculum guides; materials (media) identification, acquisition and distribution; staff development; and a career education philosophy for use in continued curriculum planning.

3. Counseling

Year One. Major activities centered upon identification of counseling service requirements at the elementary level, improvement of career guidance at the secondary level and determination of necessary action to reduce the numbers of students who dropped out of school. A secondary effort initiated was aimed at determination of the most appropriate career-counseling role for school counselors. This included an examination of present services, counselor perceptions of their role in placement and determination of necessary data bases.

Year Two. Career guidance services at the secondary level were improved through new approaches to test interpretation, use of specially trained staff in the Career Information Centers and closer interaction between counselors and other district staff. A change in scheduling procedures also contributed to better use of counselor time.

Year Three. During the final year of the project several new testing and counseling strategies were implemented. Each was based upon the work and findings of the preceding two years. For example, earlier evaluations had shown the OVIS test had little effect upon achievement of desired student outcomes and, as a result, it was dropped from the career education testing program. Conversely, the Career Information Centers had proven to be of value and activities were pursued which would enhance their usefulness.

4. Management

Year One. Integration of project goals with those of the school district received primary attention during the first year. As is typically the case, the difficulties associated with integration became more severe as project goals were cast into operational terms. Abstractions are easily accepted. The realities of an operational program are more difficult to integrate. A considerable amount of management effort was directed to developing district staff knowledge about career education and in devising viable project activities.

Year Two. Routine project supervision was extended to include developing and conducting graduate in-service classes, editing and publishing curriculum units developed by participating teachers, organizing a cataloging system for professional career education materials, and implementing an internal accounting system. A significant amount of time was necessary to structure treatment groups to insure project compliance with established evaluation guidelines.

Year Three. During the implementation-generalization phase of the project, a great deal of energy was directed to establishing operational budgets, from district funds, for numerous program components. In addition, a number of alternative funding sources were explored in an effort to preserve the momentum established during the tenure of this project. Several proposals, to both the district and other funding agencies, were prepared and submitted. In keeping with the charge to develop a generalizable model, numerous "loose ends" were consolidated. The focus, in these activities, was upon those products which had proven most effective such as the Community Resource Center, Career Information Centers and counselor intervention.

A more detailed listing of project activities is shown in Table 2.

TABLE 2

MAJOR ACTIVITY AND PRODUCT EMPHASES

GOAL AREA	PLACEMENT			CURRICULUM			COUNSELING			MANAGEMENT		
ACTIVITIES / YEAR	1	2	3	1	2	3	1	2	3	1	2	3
Initiated a Science Career Day	X			X								
Coordinated all Law Day activities for American Bar Assn.	X			X								
Developed a Community Resource Center with RSVP-VAC	X	X	X	X	X	X						
Secured resources for murals in three elementary schools	X			X								
Organized & published teacher resource file in all secondary schools	X			X								
Obtained community resources requested by teachers	X	X	X									
Surveyed all teachers for resource needs	X											
Developed prototype speaker's guide	X			X								
Made initial contacts with Army & Marine recruiters	X											
Planned work experience program with Montana Air National Guard	X											
Examined possible placement programs with Montana Employment Security Division	X	X										

TABLE 2 (continued)

MAJOR ACTIVITY AND PRODUCT EMPHASES

GOAL AREA	PLACEMENT			CURRICULUM			COUNSELING			MANAGEMENT		
ACTIVITIES / YEAR	1	2	3	1	2	3	1	2	3	1	2	3
Arranged informational program with U.S. Department of Labor wage and hour specialists	X											
Developed A-V presentation to introduce students to O.E.	X											
Developed computer Career Interest Survey with Exploring Division, B.S.A.							X					
Interviewed drop-outs and compiled results for project and district use							X	X	X			
Provided C.E.E.B. Decision-making program (materials and in-service) for counselors				X	X	X	X	X		X		
Prepared bibliography of materials for counselors and librarians							X	X	X			
Field tested Kuder E. Work Values Inventory, Career Awareness Inventory, and School Interest Inventory							X			X		
Collaborated with district Test Committee in revising the total program							X	X	X			
Provided recorders for all counseling departments							X					
Introduced counselors to new career guidance materials							X	X	X			

TABLE 2 (continued)

MAJOR ACTIVITY AND PRODUCT EMPHASES

GOAL AREA	PLACEMENT			CURRICULUM			COUNSELING			MANAGEMENT		
ACTIVITIES / YEAR	1	2	3	1	2	3	1	2	3	1	2	3
Arranged workshop on GATB and Interest Checklist							X			X		
Developed and/or conducted graduate classes & orientation week programs										X	X	X
Presented slide-tape program in all schools										X		
Arranged site visits for project and district staff										X	X	X
Selected Advisory Board & developed system of communication										X		
Cooperated with Great Falls Learning Center & Youth Committee of United Fund										X	X	X
Provided in-service for parochial schools										X		
Selected and met with curriculum, counseling and placement committees										X	X	X
Reviewed & revised district attendance policy										X	X	
Surveyed attendance & academic records of sample of drop-outs										X	X	
Refined project goals and objectives										X		

TABLE 2 (continued)

MAJOR ACTIVITY AND PRODUCT EMPHASES

GOAL AREA	PLACEMENT			CURRICULUM			COUNSELING			MANAGEMENT		
ACTIVITIES / YEAR	1	2	3	1	2	3	1	2	3	1	2	3
Developed elementary curriculum guide with county Career Education Project										X		
Established a managed natural area with science teachers and Soil Conservation Service				X								
Developed D.E.-O.E. cluster (2 classes added)				X								
Worked with State Department of Education formulating guidelines for Industrial Arts curriculum				X								
Arranged for participation of 800 students in Satellite Technology Demonstration				X	X							
Contacted NASA personnel to develop career aspects of space technology				X								
Made initial investigation into Agribusiness and Health cooperative programs				X								
Implemented "World of Construction" in one junior high					X	X						
Developed special career education guide for kindergarten					X							
Assisted in pilot Consumer Economics program development and final revision					X	X						

TABLE 2 (continued)

MAJOR ACTIVITY AND PRODUCT EMPHASES

GOAL AREA	PLACEMENT			CURRICULUM			COUNSELING			MANAGEMENT		
ACTIVITIES / YEAR	1	2	3	1	2	3	1	2	3	1	2	3
Prepared special C.E. supplement to district media catalog					X	X		X	X			
Increased and up-dated career awareness and guidance materials throughout the District					X	X		X	X			
Field tested a variety of affective measurement instruments					X	X		X	X			
Prepared bibliography of recommended guidance materials for counselors and Career Information Centers								X	X			
Published/disseminated teacher-developed instructional units					X	X						
Provided appropriate materials for handicapped students at the State School for the Deaf and Blind and the Easter Seal Rehabilitation Center				X	X	X						
Conducted a variety of in-service programs to meet needs of different groups										X	X	X
Participated in state meetings to share development problems and successes with other districts										X	X	X
Piloted a work observation program at West Junior High		X			X							
Developed brochures on job-seeking skills for Career Information Centers and teacher coordinators		X	X									

TABLE 2 (continued)

MAJOR ACTIVITY AND PRODUCT EMPHASES

GOAL AREA	PLACEMENT			CURRICULUM			COUNSELING			MANAGEMENT		
ACTIVITIES — YEAR	1	2	3	1	2	3	1	2	3	1	2	3
Piloted a pre-employment clinic at Great Falls High School		X										
Secured approval for and implemented an Agribusiness cooperative program in both high schools		X	X		X	X						
Initiated a night school program for high school drop-outs					X	X		X	X		X	X
Coordinated a workshop for counselors on Sex Equality in Guidance Opportunities (SEGO)								X				
Prepared video-tape introductions to major curricular areas for sophomore orientation					X			X				
Sponsored career-oriented field trips in Environmental Education, Social Ecology, Art, Social Science				X	X	X						
Developed a slide-tape presentation of elementary career activities for P.T.A. groups and others											X	
Sponsored Junior Postman programs in all elementary and parochial schools					X	X						
Provided in-service for Indian Home-School Coordinators and Montana State University student teachers						X			X			

TABLE 2 (continued)

MAJOR ACTIVITY AND PRODUCT EMPHASES

GOAL AREA	PLACEMENT			CURRICULUM			COUNSELING			MANAGEMENT		
ACTIVITIES / **YEAR**	1	2	3	1	2	3	1	2	3	1	2	3
Developed programs in Food Services and Child Development to expand work experience opportunities in Home Economics			X			X						
Coordinated school activities for National Hospital Week and a Federal Aviation Agency program					X	X		X	X			

C. EVALUATION OF THE PROJECT

1. 1975-76 Program

a. Introduction

Rationale. In this, the final year of the project, an attempt was make to focus evaluation resources upon those components which had the greatest potential for full integration with on-going programs of the school district. However, this plan was compromised to some degree by several conflicting demands. For example, the project sponsor needs information about student outcomes; the project staff needs information about constraints to adoption; and district officials need information about continuing costs, staffing requirements and related administration issues.

Consequently, the evaluation this year lacks rigor in any given area but does provide some information for each known group of decision-makers. This rationale is consistent with the belief that evaluation data will not insure perfect decisions but will result in qualitative improvements. The rationale employed is also consistent with the general conceptual structure of the project - Definition, Design, Development, and Installation.

Definition for Evaluation Employed. From the initial design effort, evaluation of the project has been perceived as a continuous process for the constant examination and appraisal of those activities and policies which enable a rational examination of conflicting alternatives. As pursued in this project, evaluation has been a means of enhancing and operationalizing definitions for project intents and to maximize the benefits to derive from consumption of available resources. The intent has been to provide information required for planning and managing the project and to ultimately describe the strengths and deficiencies of the project relative to desired outcomes.

Evaluation Guidelines. In publishing a set of evaluation guidelines for career education, the United Stated Office of Education achieved several positive effects. Most notable was a definitive specification of desirable student outcomes for career education programs and a systematic procedure for the design and conduct of evaluations. However, the guidelines are rather insensitive to the total context of the public schools. Consequently, implementation of the guidelines has consumed an inordinate amount of available evaluation resources, especially in view of the observable benefits.

Perhaps the most difficult problem has been the requirement for "treatment" definition. In forcing such processes, the guidelines result in evaluation data which presents only a very limited view of the total program. For example, unless a teacher is both able and willing to use a specific treatment, the probability of that treatment being employed as designed, and with sufficient vigor to have the desired effect, is very low.

Career education, by definition, represents a philosophy of education - not an isolated project or program. It is more than a few teachers using a special set of materials for a short period. The guidelines have proven relatively insensitive to this phenomenon.

Purpose. The purpose for an evaluation in developmental programs must center upon providing timely, credible and manageable information that will support project staff in meeting four basic responsibilities. These are:

1. Establishment of meaningful and valid criteria for project outcomes;

2. Effective use of project resources to attain project goals;

3. Objective and useful dissemination of information to the educational community and other concerned publics; and

4. Accountability to the sponsoring agency.

In addition to these basic responsibilities, the evaluation plan used this past year has been designed to:

1. Determine the extent to which the objectives of the project were achieved;

2. Determine what factors either enabled or inhibited the attainment of specified objectives; and

3. Promote the inclusion of successful project components into school curriculum and vocational education programs throughout the school district.

Procedures. In each of the three years the project has been operational, the evaluation has been accomplished in five phases. These are: (1) Problem definition; (2) Design; (3) Implementation; (4) Reporting; and (5) Management. These phases have been employed in an iterative manner, i.e., products from each phase have been reviewed by project staff, revised as necessary and reviewed again.

To insure that information needs of the project sponsor were satisfied, the thirteen steps established by the evaluation guidelines were divided into the five phases listed above. The intent has been to provide the sponsor with both a basis, and means, for aggregating data from many different projects. The complete evaluation design is included as Appendix A.

b. Data Generation

Introduction. Through a variety of instrumentation techniques an attempt was made to describe alternative perceptions of significant project components. By focusing data from several sources upon a single component it was felt descriptions, and measures of effects, would be both more accurate and more rigorous.

Implementation of the design required the use of standardized tests, locally developed questionnaires, rating scales, and numerous elements of record data. Each of these is described more fully below.

Standardized Tests. In the majority of cases, tests recommended in the Evaluation Guidelines were used as criteria for selected treatments. In some instances recommended tests also served as a treatment. For example, the Barclay Classroom Climate Inventory was used by teachers as a treatment with the Self-Observation Scales as the criterion. In other instances, recommended tests were used as a treatment and a locally developed rating scale served as the criterion.

One facet of the 1974-75 evaluation included rating by district teachers and counselors of recommended tests for ease of use and value of data provided. This rating resulted in a clearance in the number of tests employed for evaluation purposes.

Tests which contributed to this evaluation are listed in Table 3, below. A complete description of the test employment strategy is summarized in Table 4.

TABLE 3
TESTS EMPLOYED

TEST	Evaluation Objective	Outcome Area	Grade Level
Self Observation Scales	1	I	3 & 6
Career Education Questionnaire	2	IV	3
Career Education Cognitive Questionnaire	2	IV	6
Career Maturity Inventory	2	IV	9
Career Development Inventory	3	IV	12
Differential Aptitude Test/CPP	1	I	9
Barclay Classroom Climate Inventory	1	N/A	3 & 6

TABLE 4

EVALUATION TESTING SUMMARY

Eval. Obj.	Population			Design Requirements		
	Grade	School	N	Treatment	Criterion	Analysis
1	3	Franklin	24	B.C.C.I.	S.O.S.	$t_{T_1T_2}$*
	6	Franklin	26	B.C.C.I.	S.O.S.	$t_{T_1T_2}$
	9	North JHS	21	DAT/CPP	Self-report	$t_{T_1T_2}$
	9	Paris Gibson JHS	36	None	Self-report	$t_{T_1T_3}$
2	3	Mountain View	28	Curric. Inf.	C.E.Q.	Pre-post
		Longfellow	27	Curric. Inf.	C.E.Q.	Pre-post
		Meadow Lark	21	Curric. Inf.	C.E.Q.	Pre-post
		Valley View	27	None	C.E.Q.	Pre-post
		Collins	17	None	C.E.Q.	Pre-post
	6	Franklin	23	Curric. Inf.	C.E.C.Q.	Pre-post and difference between groups
		Meadow Lark	29	Curric. Inf.	C.E.C.Q.	
		Russell	27	Curric. Inf.	C.E.C.Q.	
		Franklin	24	None	C.E.C.Q.	
		Riverview	28	None	C.E.C.Q.	
		Roosevelt	24	None	C.E.C.Q.	
	9	East JHS	11	Career Education Course	C.M.I.	Pre-post
3	9	North JHS	25	Consumer Econ course	C.M.I.	Pre-post and post-only with comparison groups
		East JHS	11	Career Education course	C.M.I.	
		North JHS	22	None	C.M.I.	
		East JHS	19	None	C.M.I.	
	12	Great Falls HS	23	CEEB: Decisions & Outcomes	C.D.I.	Post-only comparison
		Great Falls HS	18	None	C.D.I.	

* T_1 = 1975 Baseline group, T_2 = 1976 Treatment group, T_3 = Comparison group

Questionnaires. Six questionnaires were administered to generate data for this evaluation. The purpose and objective addressed by each questionnaire are shown in Table 5.

TABLE 5

QUESTIONNAIRES EMPLOYED FOR THE EVALUATION

Respondent(s)	Eval. Obj.	Purpose/Focus
Work Experience Students	4	To determine the degree of congruence between present job and perceived career goals
Co-op Work Coordinators	5	Identify the extent to which the number and type of job preparation opportunities have been expanded
Students NOT enrolled in co-op or work experience programs	7	Identify the extent to which students find available placement service of value and the extent to which each type available is used
Students who use the Career Information Center	8	Perceptions of Career Information Center value in career decision processes
Career Information Center Director	8	Inventory of Career Information Center resources; procedures for student use of Career Information Center
Teachers who have taken a Career Education course	13	Determine the extent to which the use of Career Education strategies is retained

Record Data. Frequently, unanticipated outcomes prove more valuable than those planned and, in many cases, these are most readily captured and documented through collection of various forms of record data. A summary of these types of data which were used in this evaluation is presented in Table 6.

TABLE 6

RECORD DATA WHICH CONTRIBUTED TO THE EVALUATION

Eval. Obj.	Source	Description
4	Staff	- Description of work experience program - Inventory of available work experience sites - List of work experience stations used - Listing of students placed in work experience
5	Staff	- Number of job sites available for work experience and cooperative work programs - Description of vocational education courses available - Number of job sites used for work experience and cooperative work programs, 1975-76 - Inventory of Community Resource Center materials
6	Project Director	- Financial report for 1975-76
7	Staff	- List and description of placement services available to subjects (present and former)
8	Staff	- Inventory of Career Information Center materials - Total hours of student CIC use
9	Center Staff	- Number of requests for service received at the Community Resource Center - List of community resources inventoried - Description of procedure for teacher use of community resources
12	District Staff	- Description of each of the following project-developed components: CIC, CRC, in-service training course, counselor roles, curriculum units, special materials development procedure, work programs, and placement programs

A more complete description of data generation and related processes employed in the conduct of this evaluation is shown in the total design (Appendix A). Much of the information presented there has been purposely omitted from this report to simplify the report format.

c. Report of Data Related to Goal Attainment

Introduction. Data are reported below in a format which emphasizes the outcome areas established by the Evaluation Guidelines. The relationship between outcome objectives is established in the evaluation design.

A number of project activities, and related evaluation objectives, were not directly related to student outcomes. For example, establishment of the Community Resource Center consumed project resources but did not contribute directly to modification of student behavior. These types of activities are reported as "Related Activities."

Self-Awareness. Changes in self-awareness, as a result of project participation, were observed at grades three, six and nine. At each grade level a pre-post design was planned using a criterion judged appropriate for the treatment. However, numerous administrative problems were encountered and the design for grades three and six was changed to use of 1975 data as a baseline for comparison purposes.

The treatment at grades three and six was administration of the Barclay Classroom Climate Inventory and subsequent use of those data by classroom teachers. The criterion was student performance on the Self-Observation Scales.

Data related to this treatment are shown in Table 7. There were no significant differences in criterion performance by treatment groups from 1975 and 1976.

TABLE 7

SELF-OBSERVATION SCALES PERFORMANCE BY TREATMENT GROUPS: GRADES 3 AND 6

Data Reported	Group	Scales							
		Self Acceptance	Self Security	Social Maturity	Social Confidence	School Affiliation	Teacher Affiliation	Peer Affiliation	Achievement Motivation
N of cases	A	43	43	43	43	43	43	43	43
	B	52	52	52	52	52	52	52	52
	C	42	42	42	42	42	42	42	42
Average	A	49.79	50.05	51.09	51.00	48.70	49.77	51.58	51.00
	B	50.60	55.85	51.85	51.40	49.98	52.17	52.98	49.69
	C	45.29	51.10	42.69	43.74	49.50	44.45	47.02	48.40
Std. Dev.	A	9.43	9.98	9.85	9.73	8.55	9.00	9.82	6.05
	B	9.73	8.39	7.49	7.71	10.42	7.39	8.62	5.22
	C	11.94	13.86	12.38	8.42	11.23	12.98	12.31	6.00
Average Percentile	A	51.01	50.79	56.26	54.49	46.65	52.28	56.98	53.19
	B	54.37	68.56	57.33	55.25	51.17	60.00	60.94	48.96
	C	40.57	56.02	35.57	32.07	49.17	40.93	45.79	50.52
$\bar{x}$ Total - 1976		48.56	52.33	48.54	48.71	49.39	48.79	50.52	49.70
$\bar{x}$ Total - 1975		48.42	52.57	48.80	48.93	49.43	49.05	50.72	49.71

The treatment at grade nine was administration of the Differential Aptitude Test/Career Planning Program and subsequent interpretation by teachers and counselors. The criterion employed was an instrument designed to measure student perceptions of their own abilities. The validity and reliability of this instrument were established through evaluation procedures used during 1974-75.

These data are reported in Table 8. As shown, the pre-post gain in student perceptions of their own abilities was significant.

TABLE 8

CHANGE OBSERVED IN TREATMENT GROUP SELF-AWARENESS

Grade 9, North Junior High

Treatment: DAT/Career Planning Program

Criterion: Self-Report of Abilities

Scale	$\bar{x}$, pre-test	$\bar{x}$, post-test	df	t_d
VR	3.36	3.65		
NA	3.29	3.42		
AR	3.00	3.80		
S+A	2.68	2.70		
MR	3.21	3.63		
SR	2.89	3.15		
SP	3.25	3.30		
LU	3.50	3.37		
Total	3.14	3.37	27	2.26*

* significant at .05 level

Awareness Of, and Knowledge About, Work. Measures of student performance in this outcome area were taken at grades three, six and nine. The treatment at grade three was Curriculum Infusion, which was defined for this project as a treatment administered by a teacher trained in career education. Comparison groups were employed with the criterion being the Career Education Questionnaire.

These data are presented in Table 9. As may be seen, the pre-post test difference was not significant. However, post-test differences between the treatment and comparison groups were highly significant. Available data do not enable identification of those factors which may have caused this difference.

The treatment for grade six was also Curriculum Infusion. However, at this level the Career Education Cognitive Questionnaire was employed as the criterion. Data obtained are reported in Table 10.

As may be seen, the results of this study are perplexing. Both the treatment and comparison groups show a decline with the comparison group performance dropping significantly. These data suggest some other factors were operating, possibly problems in test administration.

For grade nine the treatment employed was a special Career Education Unit developed locally. This single treatment was retained from the preceding year (the ATS-VI Demonstration was no longer available) as it appeared to have the greatest promise. However, the results, again using the Career Maturity Inventory as a criterion, suggest this decision may have been based upon faulty data.

The results of testing in 1975-76 are shown in Table 11. The pre-post test decrease proved significant, whereas the gain by students in 1974-75, shown in Table 12, was significant. In further analysis of these data, shown in Table 13, the differences between 1975 and 1976 proved not significant. This suggests the problem may be the result of such factors as measurement error.

Given the unique nature of student populations at this level and the associated instructional problems, further analysis to identify an appropriate treatment and criterion measure, are warranted.

TABLE 9

CHANGE IN AWARENESS OF, AND KNOWLEDGE ABOUT, WORK

Grade 3

Treatment: Curriculum Infusion (teachers trained in Career Education)

Criterion: Career Education Questionnaire (C.E.Q.)

	N	$\bar{x}$, pre	$\bar{x}$, post	df	t
Treatment	76	17.32	22.45	2	2.29
Comparison	44	15.15	17.61	2	10.48 *
Treatment			22.45		
Comparison			17.61	4	3.61 **

* significant at .05 level, one-tailed test

** significant at .05 level, two-tailed test

TABLE 10

CHANGE IN AWARENESS OF, AND KNOWLEDGE ABOUT, WORK

Grade 6

Treatment: Curriculum Infusion (teacher trained in Career Education)

Criterion: Career Education Cognitive Questionnaire (C.E.C.Q.)

	N	$\bar{x}$, pre	$\bar{x}$, post	df	t
Treatment	69	39.92	39.89	2	0.05
Comparison	76	40.37	38.40	2	4.13 *
Treatment			39.89		
Comparison			38.40	4	1.53

* significant at .05 level, one-tailed test

TABLE 11

CHANGE IN AWARENESS OF, AND KNOWLEDGE ABOUT, WORK

Grade 9, East Junior High

Treatment: Career Education Class, 1975-76

Criterion: Career Maturity Inventory (C.M.I.)

Competence Test

N, pre	N, post	$\bar{x}$, pre	$\bar{x}$, post	df	t_d
5	7	14.04	11.74	4	2.46 *

* significant beyond .07, one-tailed test

Attitude Scale

Pre-test		Post-test		Change	
Raw Score	%ile	Raw Score	%ile	Raw Score	%ile
36.6	73	33.0	58	- 3.6	- 15

TABLE 12

CHANGE IN AWARENESS OF, AND KNOWLEDGE ABOUT, WORK

Grade 9, East Junior High

Treatment: Career Education Class, 1974-75 Baseline

Criterion: Career Maturity Inventory (C.M.I.)

Competence Test

N, pre	N, post	$\bar{x}$, pre	$\bar{x}$, post	df	t_d
31	26	12.1	13.0	4	3.11 *

* significant beyond .025 level, one-tailed test

Attitude Scale

Pre-test		Post-test		Change	
Raw Score	%ile*	Raw Score	%ile	Raw Score	%ile
32.9	44	37.2	66	+ 4.3	22

* Local percentile

TABLE 13

COMPARISON OF DIFFERENCES BETWEEN 1975 BASELINE AND 1976 TREATMENT GROUPS IN AWARENESS OF, AND KNOWLEDGE ABOUT, WORK

Grade 9, East Junior High

Treatment: Career Education Class

Criterion: Career Maturity Inventory (C.M.I.)

Competence Test

1975		1976			
N	$\bar{x}$, pre	N	$\bar{x}$, pre	df	t_i
31	12.1	5	14.04	4	1.3

1975		1976			
N	$\bar{x}$, post	N	$\bar{x}$, post	df	t_i
26	13.0	7	11.74	4	1.21

Attitude Scale

	Post-test		Post-test		Change	
	Raw Score	%ile	Raw Score	%ile	Raw Score	%ile
1975	32.9	44	37.2	66	+ 4.3	+ 22
1976	36.6	73	33.0	58	- 2.4	- 3.6
Difference	+ 3.7	+ 29	- 4.2	- 8	6.7	25.6

Career Decision-Making Competence. Evaluation in this area was limited to grades nine and twelve with one treatment established for each level. For grade nine, the treatment was a specially developed Career Education Unit nested within a Consumer Economics class. A post-test only design, with treatment and comparison groups, was employed. The Career Development Inventory served as a criterion.

These data are summarized in Table 14. As shown, significant differences were observed on each of the test scales and on the total test.

TABLE 14

COMPARISON OF TREATMENT AND COMPARISON GROUP CHANGES IN CAREER DECISION-MAKING SKILLS

Grade 9, North Junior High

Treatment: Special Exphasis on Career Education in Consumer Economics Class

Criterion: Career Development Inventory (C.D.I.)

		$\bar{x}$, post-test			
Scale / Group	N	A	B	C	Total
Treatment	29	107.89	89.13	16.89	207.93
Comparison	22	96.13	159.0	13.59	268.73
	df	49	49	49	49
	t	1.88*	4.55**	4.46**	11.13**

* significant beyond .07, two-tailed test

** significant beyond .001, two-tailed test

For grade 12, the CEEB: Decisions and Outcomes program was used for the treatment and the C.D.I. again employed as a criterion. In this study, a pre-post test and treatment - comparison group post-test only strategy was employed. Data obtained from pre-post-testing for the treatment group are presented in Table 15. Except for scale B, all post-test gains were significant.

TABLE 15

CHANGES OBSERVED IN CAREER DECISION-MAKING SKILL

Grade 12, C.M. Russell High

Treatment: CEEB: Decisions and Outcomes

Criterion: Career Development Inventory (C.D.I.)

Scale	$\overline{x}$, pre	$\overline{x}$, post	df	t_d
A	100.05	113.20	19	3.81***
B	113.35	111.10	19	0.36
C	16.55	13.45	19	1.87**
Total	229.95	237.75	19	1.04*

*** significant beyond .005, one-tailed test

** significant beyond .05, one-tailed test

* significant beyond .25, one-tailed test

Data comparing the treatment and comparison group are summarized in Table 16. For each scale and for the total test score, differences were significant as hypothesized.

TABLE 16

COMPARISON OF TREATMENT AND CONTROL GROUP CHANGES IN CAREER DECISION-MAKING SKILL

Grade 12, C.M. Russell High

Treatment: CEEB: Decisions and Outcomes

Criterion: Career Development Inventory (C.D.I.)

		$\bar{x}$, post-test			
Scale / Group	N	A	B	C	Total
Treatment	20	113.20	111.10	13.45	237.75
Comparison	30	106.67	78.37	15.5	200.53
	df	48	48	48	48
	t	5.07***	2.61***	2.13**	6.72***

*** significant beyond .001, two-tailed test

** significant beyond .05, two-tailed test

Related Activities. A project which is charged with developing an exemplary program in career education must necessarily address a broad range of activities. These are related to development of specific components for use in classrooms and to implementation of the total effort. These diverse activities are reported below.

1. Work experience program placement. The Great Falls Public Schools have operated both a work experience and cooperative work program for several years. However, there has been some concern that perhaps the work experience program, which offers students an opportunity to practice in a work situation skills learned in a specific class, has not directly supported students in their efforts to make career decisions.

   Students enrolled in this program during the spring of 1976 were asked to respond to a questionnaire which was designed to obtain information about student perceptions of the program's effectiveness. Respondent demography is summarized in Table 17.

TABLE 17

WORK EXPERIENCE PROGRAM STUDENT DEMOGRAPHY

n=248

Age		16	17	18	19	20
	n	1	81	151	14	1
	%	.4	32	61	6	.4
Sex		F	M			
	n	128	120			
	%	52	48			
Grade		10	11	12		
	n	0	1	247		
	%	0	.4	99.6		
School		GFHS	CMR			
	n	145	103			
	%	58	42			

Among the respondents, 227 (91.5%) reported they had made a career goal decision and 21 (8.5%) reported they had not. Representative career goals included the following:

- Nursing (health related work)
- Accounting (office management)
- Business (marketing)
- Recreation
- Education
- Photography
- Home economics
- Military
- Dental assistant
- Interior decorating
- Medicine
- Continue in present position and work up
- Communications (radio)(telephone)(electronics)
- Agriculture
- Real estate
- Fish and game (wildlife)
- Butcher
- Carpenter
- Auto/truck mechanic
- Rancher
- Law enforcement
- Contractor (building)
- Advertising
- Retail business
- Trucking

In nearly every case, students listed more than one career goal, indicating that decisions made were only tentative. However, the important data from this question is that all students had at least an opinion about what they perceived as career goals.

When asked if the work experience program had helped them clarify their career goals, 201 (81%) responded affirmatively and 47 (19%) responded negatively. When asked how the work experience program had helped clarify career goals, the following types of responses were received:

- Gained confidence and experience
- Gained knowledge of own abilities
- Learned about working in chosen field
- Learned how to get along with people
- Learned what I didn't want to do
- Learned about jobs in which futures are very limited
- Learned skill requirements for a chosen career

- Goals became real, instead of a dream or wish
- Learned how to take orders and how this is part of a career
- Provided me with a broad range of experience

When asked why the work experience program had not been of value in clarifying goals, some students responded as follows:

- I only wanted to make some money
- Nothing I have done is related to my chosen career
- Didn't have that type of job
- Have only learned what I don't want to do

Enrolled students were asked what they perceived as the most and least satisfying aspect of the total work program. Their responses are summarized in Table 18, on the following page. Unfortunately, many students were looking upon the work experience program as a means to gain full-time employment in order to support themselves. This indicates a need to more fully inform students about the intent of work experience and about other work programs available through the schools. It also suggests a need to effect tighter integration of student needs and school programs, i.e., perhaps those students who have a strong need for financial independence should be enrolled in a program which enables them to work full time.

Finally, this group of students were asked how they felt the program could be improved. Suggestions made included the following:

- More discussion about the program with our teachers
- Greater number of options
- Higher pay for students
- Improved scheduling procedures
- More independent study in regular courses
- Increased employer supervision
- More appropriate homework assignments
- Include professions
- Adjustable hours of work
- Increase salaries
- Improve placement efficiency and effectiveness to insure greater similarity between interests and work

TABLE 18

STUDENT PERCEPTIONS OF THE MOST AND LEAST SATISFYING ASPECTS OF THE WORK EXPERIENCE PROGRAM

CHARACTERISTICS	Most		Least	
	n	%	n	%
Salary/Wages	85	34	40	16
Released time from school	27	11	50	20
Meaningfulness of experience	104	42	20	8
Range of experiences	84	34	20	8
Other	0	0	65	26

Representative comments:

Most Satisfying	Least Satisfying
- Experience	- Want to work more hours
- Learned about public	- Keeping up with school
- Increased special skills	- Some of the people working with
- Enjoyed working	- Miss school friends
- Learning on the job	- Not related to career goals
- Making a contribution	- Work hours are difficult
- Feel useful	- Lack of time for other activities
- Money for college	- Salaries are too low
- Meeting different people	- Being treated as a student while on a job
- Variety of work	

Student respondents who participated in this study were apparently well qualified to rate the program as evidenced by their employment history. Over 95% had been employed in more than one position, both the same as, and different from those positions held presently. Typical of jobs held previously by respondents were:

- Business office (secretarial)
- Personal services
- Sales
- Recreation
- Child care
- Health services
- Construction
- Agriculture/farming
- Trades (plumbing, carpentry, masonry, etc.)
- Miscellaneous labor

2. Expansion of job preparation opportunities. During the three year tenure of the project, there have been a number of changes in selected aspects of the cooperative work program. Several of these have been the direct result of intervention by the project staff. A summary of the total enrollment for 1975-76 is shown in Table 19. Also shown is a minor drop in total enrollment from 1974-75, but a significant increase in number of work stations inventoried.

TABLE 19

COOPERATIVE WORK PROGRAM SUMMARY

Program	School	Students	Work Stations	Total	
				Students	Work Stations
Distributive Education	GFHS	72	74	72	74
	CMRHS	60	70	60	70
Industrial Cooperative Education	GFHS	40	35	40	35
	CMRHS	27	200	27	200
Office Education	GFHS	56	65	56	65
	CMRHS	21	25	21	25
Agribusiness	GFHS	15	25	15	25
	CMRHS	25	26	25	26
			Program Total	316	520
			Change (1975 to 1976)	- 13	+ 183

The drop in enrollments is an especially important element of data as it was clear in 1974-75 that coordinators' student loads were too heavy. Coupled with the increase in number of coordinators (from 9 to 11), the student load for each coordinator dropped from over 41 to 28. Other important aspects of the program are summarized in Tables 20 and 21. Generally, there have been several positive changes, e.g., the increases in use of student career objectives as a criterion for selection and site assignment.

TABLE 20

CHANGES OBSERVED IN COOPERATIVE WORK COORDINATOR PROBLEMS AND ACTIVITIES

Average number of students supervised

1974	1975	1976
24	41+	28

Conduct a formal student training program

	1974	1975	1976
n	5	9	11
yes	20%	78%	18%
no	80%	22%	82%

Criteria employed to select students

CRITERION	1974	1975	1976
Completed Pre-requisites	78	45	100
Attendance	100	100	82
Attitude	100	86	82
Grades	82	100	55
Economic need	38	0	27
Career Objectives	73	92	100
Employability	76	90	73
Student Educational Plans	58	53	45
Teacher Recommendations	81	20	27

TABLE 21

CONGRUENCE BETWEEN COOPERATIVE WORK PROGRAM ASSIGNMENTS AND STUDENT CAREER GOALS

PROGRAM	Percentage of students supervised					
	0	10-30	31-50	51-70	71-90	91-100
Distributive Education			50	50		
Industrial Cooperative Training				100		
Office Education				30	41	89
Agribusiness			50	50		

Cell entries are percentage of coordinators who estimated each category of student percentages where job assignments were congruent with career goals.

The tremendous change in use of formal training procedures was alarming when first noted. However, further investigation revealed that more coordinators had adopted an individualized form of training which they did not classify as "formal." Again, further investigation revealed that the procedure for individualizing programs was systematic, which allowed coordinators to adjust training content to individual student needs. The program has thus shifted, rather significantly, from a traditional, formal type of training to one which is individualized.

When asked what they perceived as the most significant constraints to operation of the cooperative work program, coordinators cited the following:

1. The absence of an Agribusiness program in the summer when more sites are available;

    2. Competition with non-cooperative students;

    3. Too many sites to inventory and maintain;

    4. Lack of clarification of differences between cooperative work and work experience;

    5. Indecisiveness of students, re, career goals;

    6. The program is too diverse; and

    7. Emphasis on employability of students.

3. Report of Financial Expenditures. This information is presented in Table 22.

TABLE 22

PROJECT BUDGET REPORTS

Expenditures	Level of Emphasis					Total
	K-6	7-12	7-9	10-12	K-12	
Personnel						
Professional Salaries	15,120	18,600		18,700	26,840	79,260
Clerical Salaries				4,420	5,262	9,682
Employee Benefits	2,261	2,793		3,458	4,788	13,300
Travel	1,356	2,200	488	3,504	1,416	8,964
Supplies & Materials	4,067	2,556	3,852	2,772	2,049	15,296
Communications					1,190	1,190
Services					6,370	6,370
Equipment				1,308	726	2,034
TOTALS	22,804	26,149	4,340	34,162	48,641	136,096

4. Development of a Coordinated Placement Service. A continuing concern of project staff has been the lack of coordination between available placement services and their effectiveness in satisfying student needs.

   Prior to initiating a major development effort, it was felt prudent to establish a data base which would define the problem with greater precision.

One dimension of required data was identification of available services. Of special concern were: (1) the names of agencies located in Great Falls; (2) their addresses; (3) services offered; (4) fees charged; (5) any particular affiliation they maintained, such as a government agency; (6) hours of operation; and (7) special placement emphasis they engendered. This information was informally collected and not reported here as it does not contribute to the project evaluation.

A second dimension of the required data base was identification of the degree to which placement services were used by students, by which students, and perceived effectiveness of available services. A sample of 30 students working locally was asked to respond to a questionnaire designed to elicit the needed information. Shown in Tables 23 through 25 are: (1) respondent demography; (2) respondent employment history; and (3) respondent use and rating of available services.

Perhaps the most significant results of this survey are the following: (1) the number who had not graduated from high school (86%); (2) over 50% were not currently employed or had not been previously employed; (3) the number of students who did not use a placement service to find employment (83%); and (4) the number of students who found those services they did use very useful (60%) and readily available (60%).

TABLE 23

PLACEMENT STUDY RESPONDENT DEMOGRAPHY

Age		14	15	16	17	18	19
	n	1	2	8	10	7	3
	%	3	6	25	32	22	9
Sex		M	F				
	n	12	19				
	%	38	61				
Grade		9	10	11	12		
	n	9	8	11	13		
	%	29	25	35	9		
Graduated from H.S.		Yes	No				
	n	1	30				
	%	3	96				

TABLE 24

PLACEMENT STUDY RESPONDENT EMPLOYMENT HISTORY

Currently Employed		Yes	No
	n	14	17
	%	45	54
Previously Employed		Yes	No
	n	11	18
	%*	35	58

* no response by 7%

TABLE 25

USE AND RATING OF EMPLOYMENT AND/OR PLACEMENT SERVICES

Used a service to find employment		Yes	No		
	n	5	26		
	%	16	83		
Usefulness of services		Very	Some	Little	None
	n	3		1	1
	%	60		20	20
Availability of services		High	Low		
	n	3	2		
	%	60	40		
General rating/placement services		Very good	Good	Poor	Terrible
	n	1	3	1	-0-
	%	20	60	20	-0-

The following is a representative listing of factors students cited as being considered in making an over-all rating of placement services they did use:

> "...personnel were very understanding."
>
> "...people have done everything possible for me."
>
> "...the availability of such services."

These data suggest the following:

1. Many respondents had no career goals;
2. Respondents either did not know about available placement services, did not need them, or were unwilling to use them; and
3. A need exists for strengthening placement through an information program targeted at teen-agers and for coordination of services among agencies.

5. Use and Influence of Career Information Centers. In conjunction with an intensified career counseling program throughout the district, Career Information Centers were established at each of the high schools. Each center was charged with the same responsibilities but were different in that one had a full-time staff person assigned.

   As reported last year, librarians were directed to place career oriented materials in these centers to facilitate student acquisition and use. Operationally, the centers remain unchanged from the past year with one exception. An emphasis is now placed upon career clusters in organizing the collections.

   Staffing for the one center, this year, has relied more heavily upon the use of para-professionals. Generally, this strategy has proven effective.

   Student perceptions of the usefulness of the Career Information Centers are described in Tables 26 and 27. Perhaps the most significant finding shown is the number of students who found the centers useful in making a career decision.

TABLE 26

CAREER INFORMATION CENTER USAGE
(Center with Staff Person Assigned)

User Demography (n=86)

Age	15		16		17		18		19	
Sex	M	F	M	F	M	F	M	F	M	F
Grade 10	2	11	24	18						
Grade 11			2	1		2				
Grade 12						1	7	18		

Cell entries are number of users.

Reasons for using the CIC

Own Choice - 27
Counselor Referral - 5
Teacher Referral - 74
Other Referral - 16

Usefulness of the CIC

In finding a job:
Yes - 25
No - 36
Not expected - 45

In making a career decision:

Yes - 65
No - 18
Not expected - 19

TABLE 27

CAREER INFORMATION CENTER USAGE
(Center without Staff Person Assigned)

User Demography (n=26*)

Age	15		16		17		18		19	
Sex	M	F	M	F	M	F	M	F	M	F
Grade 10	5	8	9	4						
Grade 11										
Grade 12										

Cell entries are number of users.

* This survey was conducted with only one class.

Reasons for using the CIC

Own Choice - 3
Counselor Referral - NA
Teacher Referral -23
Other Referral - NA

Usefulness of the CIC

In finding a job:
Yes - 2
No - 11
Not expected - 13

In making a career decision:

Yes - 14
No - 8
Not expected - 4

6. Community Resource Development. This project activity has met with a high degree of acceptance from the outset, indicating that it satisfies a well defined need. Usage data for 1974-75 and 1975-76 are presented in Table 28. The increase in number of users and number of resources used is especially significant in that; (1) a teacher strike in the fall of 1975 delayed use of the center for at least one month; and (2) the project has not advertised, or in any other way stressed, the center services. A complete description of procedures used to initiate and operate the center is included in Appendix C.

TABLE 28

USE OF COMMUNITY RESOURCE CENTER

SCHOOL	No. of Users		No. of Resources Used	
	1975	1976	1975	1976
CMR High School	6	9	7	39
Great Falls High School	9	5	20	15
East Junior High	10	5	26	20
North Junior High	7	8	14	19
Paris Gibson Junior High	1	4	2	29
West Junior High	3	2	6	5
Chief Joseph	3	1	5	1
Collins	2	1	3	1
Franklin	5	6	8	8
Lewis & Clark	1	9	1	16
Lincoln	1	1	2	2
Longfellow	6	4	11	4
Lowell	3	2	5	1
Loy	6	12	14	56
McKinley	4	2	27	1
Meadow Lark	2	-	4	-
Morningside	1	-	1	-
Mountain View	11	12	24	29
Riverview	7	6	14	8
Roosevelt	1	-	1	-
Russell	2	6	2	13
Sacajawea	4	13	12	54
Skyline	9	11	24	25
Sunnyside	2	6	3	13
Valley View	4	3	7	1
Whittier	2	1	3	2
Sub-Total	111	124	232	362
Deaf & Blind School	4	3	7	2
Parochial Schools				
Holy Family	1	1	3	3
Our Lady of Lourdes	1	1	1	1
St. Gerard's	2	2	5	2
St. Joseph	3	-	7	-
Other Agencies	-	9	-	47
TOTAL	122	141	255	417

d. Conclusions and Recommendations

Introduction. Problems internal to the district, such as a teacher strike, had a debilitating effect upon the momentum generated by project staff during the preceding years. However, this type problem was not singularly responsible for difficulties encountered.

From the outset, the conceptual model for the project had emphasized the need to focus upon implementation of validated strategies during the third and final year. Numerous conditions imposed upon the project virtually negated the opportunity to establish and pursue implementation goals. As a consequence, it was necessary for the project to continue in a developmental mode, rather than adopt an implementation plan.

Conclusions. Data presented in preceding sections support the following conclusions:

1. Self-awareness:

    (a) Grade three and six: Even in the absence of comparison groups, there is some evidence that the B.C.C.I. has some positive effect upon student self-awareness.

    (b) Grade nine: Significant gains in student perceptions of their abilities were observed when the DAT/CPP was used as a treatment.

2. Awareness of, and knowledge about, work:

    (a) Grade three: Teachers trained in career education have a greater influence than those who are not trained on student awareness of, and knowledge about, work.

    (b) Grade six: Curriculum Infusion, as a treatment condition, did not have a significant effect.

    (c) Grade nine: The special career education class had a significant effect.

3. Career decision competence:

    (a) Grade nine: A career education unit, used in the context of a consumer economics class, had a highly significant effect.

    (b) Grade twelve: The CEEB program, Decisions and Outcomes, had a significant effect upon student performance on the selected criterion.

4. Placement practices:

   Several important data bases have been established for use in initiating development activities

5. Expansion of job preparation opportunity:

   A number of important improvements have been made in this program including a reduction in the student/supervisor ratio, increasing the number of training sites inventoried, and individualization of training programs.

6. Report of financial expenditures:

   Excellent records were maintained by the project director which insured the absence of comingling of district and project funds. Judgements about the distribution of funds are left to the project sponsor.

7. Placement service coordination:

   The necessary data bases for problem identification and initiation of development activities were established.

8. Career Information Centers:

   These centers continue to be well received and used by students. There is some evidence to suggest they have proven influential in student career decision-making.

9. Community resources:

   The number of resources inventoried, and use of those resources by teachers, has continued to expand. This component of the project may ultimately prove to be one of the more significant - both in terms of its capability of providing students with needed experiences and in heightening career education awareness among school staff and the community.

Unfortunately, many important project effects have not, and cannot, be adequately documented. Perhaps the more important of these has been the unpretentious, but very effective, manner in which the staff has supported district teachers with a subsequent increase in teacher sensitivity to, and knowledge about, career education. These activities have been most highly congruent of all project efforts with the belief that career education is more than another program to be installed by administrative fiat.

While it is possible to develop a program in isolation from the proposed context of use, and the persons for whom it is designed, such tactics have historically failed. There are exceptions, but they have been very costly and consequently few in number.

This project has been especially sensitive to the product utilization context and to insure that target audiences were closely involved in product development. These policies, and emergent strategies, have had an implementation effect not amenable to standard measurement techniques.

Recommendations. The following recommendations are based upon data presented in this report, preceding reports, and general observations of the project:

1. A set of objectives directly related to implementation of fully developed components should be established and resources allocated to their attainment.
2. Policy recommendations should be made to the District Trustees which will facilitate establishment of a context conducive to continued support of career education concepts.
3. A plan for coordination of placement services should be developed and implemented.
4. Necessary policies should be established which will ensure enrollment of a higher proportion of working students in school sponsored programs.
5. Budget procedures should be considered which will ensure continued operation and/or expansion of the following components: (a) staff training; (b) Community Resource Center; (c) Career Information Center; and (d) counselor intervention for career purposes.

2. Evaluation Outcomes

This is the final report of an intensive, three-year, developmental effort. A summary of major outcomes is presented below to provide the reader with a comprehensive overview of the total program. Detailed information from which this summary has been derived may be found in earlier sections of this report and in previous interim reports.

Year One. The more significant evaluative conclusions from Year One were:

a. Derivation of a workable model to guide program development and establishment of necessary management procedures to implement the model were completed and proven successful;

b. A staff training program was initiated which reached over 10% of the District professional staff. A significant increase in the number of career education strategies used was noted among those teachers who completed the program;

c. A career education resource base was initiated and coordinated with acquisition and distribution procedures employed by both the school libraries and district media center;

d. Data obtained from experimental use of several tests were used to design an elementary career counseling program;

e. Counselor attitudes toward career counseling and placement were shown to be positive but that several constraints exist which prevented their pursuing this role;

f. A strong management procedure was implemented which proved to be highly effective for planning and resource allocation purposes.

Year Two and Three. Publication, and required implementation, of evaluation guidelines by the project sponsor necessitated significant changes in evaluation procedures employed during the two final years of the project. Satisfaction of the guidelines required delineation of specific treatments and, where possible, determination of the statistical significance of observed effects. Consequently, it is more expedient to report the evaluation outcomes for these two years in a different format. These outcomes, including both student outcomes and related activities, are summarized in Table 29.

TABLE 29

SUMMARY OF EVALUATION OUTCOMES FOR YEARS TWO AND THREE

Grade	Outcome Area	Treatment/Activity	Criterion	Effects*		
				S.	N.S.	N obs
3	Self-Awareness	Barclay Classroom Climate Inventory	S.O.S.		3	2
6	Self-Awareness	Barclay Classroom Climate Inventory	S.O.S.		3	2
9	Self-Awareness	D.A.T./Career Planning Program	Self-Report	2		
3	Work Awareness	Curriculum Infusion (teacher trained in career ed.)	C.E.Q.			
6	Work Awareness	Field trips, resource persons, curriculum infusion	C.A.I.	2		
9	Work Awareness	Curriculum Infusion			2	
		ATS-VI Demonstration Program	C.M.I.		2	
		ATS-VI and Counselor intervention	C.M.I.	2		
		O.V.I.S. test interpretation	C.M.I.		2	
10		O.V.I.S. and CEEB/D&O used by teacher and counselor	C.M.I.		2	
11		Use of the Career Information Center	A.C.D.		2	
8&11		Student maturation	A.C.D.	2		
4&6	Basic Skills	Curriculum Infusion	I.T.B.S.		2	
10&12	Career Decisions	CEEB Decisions & Outcomes	C.D.I.		2	
6	Work Awareness	Curriculum Infusion	C.E.C.Q.		3	
9	Work Awareness	Career Education class	C.M.I.	3		
9	Career Decisions	C.E. Unit in Consumer Economics	C.D.I.	3		
12	Career Decisions	C.E.E.B. Decisions & Outcomes	C.D.I.	3		
11-12	NA	Work Experience Program	judgement	2-3		
10-12	NA	Expansion of job preparation program	judgement	2-3		
NA	NA	Program management	NA	2-3		
10-12	NA	Coordination of job placement services	judgement	2-3		
10-12	NA	Career Information Centers	student use	2-3		
1-12	NA	Community Resource Center	teacher use	2-3		
3-12	NA	Curriculum Guides	NA			2-3

* S = significant; N.S. = not significant; N obs = not observed (test admin problems; inadequate criterion, etc)
2 = Year Two; 3 = Year Three

D. PROJECT OUTCOMES

1. Introduction

An extensive discussion of the developmental procedures to be employed by the project was presented in the first interim report. The model proposed included three "Levels of Development." While these "levels" were not intended to be congruent with years of project operation, there is a natural correspondence, and some overlapping, between the two.

The general rationale was, in a systematic manner, to define components for a "transportable" model, design and develop each component, and then focus upon implementation of those components within the district. These procedures are consistent with general system theory, which predicates accomplishment in a linear mode. However, the complexities of an operational school system prevent maintaining linearity in development and implementation. Too many variables interact in an uncontrolled and unpredictable fashion. Consequently, design, development and implementation were found to occur simultaneously in many instances, with strategies for implementation being involved before product design had been completed.

These occurrences were consistent with findings from a recent R.A.N.D. study of educational change-agents, which identified three implementation strategies as most effective. These were: (1) local materials development; (2) on-going, concrete staff training; and (3) iterative, on-line, planning combined with frequent staff meetings to obtain desired and necessary feedback.

Each of these strategies has been fully employed by the project during the past three years, with the effectiveness of each clearly established in published evaluations. One factor not cited in the R.A.N.D. study, the resolution of policy and/or legal constraints to implementation, has also been addressed by the project. Additional work remains to be done in this latter area.

In any social context, whether it be education or some other social service/activity, the concept of implementation remains simultaneously ambiguous and complex. This is largely a result of the idiosyncratic requirements of each setting in which implementation is to occur. The problem thus becomes one of determining, for each setting, which variables are most significant and developing a plan for manipulation of those variables.

Because the "rules" for implementation and/or generalization are different for each situation, it is virtually impossible to identify a common set of data which will facilitate implementation across a range of settings. In this sense, the charge to the project by the sponsor to develop a "generalizable" model was somewhat naive.

However, the Center for Vocational-Technical Education at Ohio State University has developed a set of categories for describing an innovation which they feel closely approximates a "common data base" for implementation.* The five categories named are:

a. Characteristics of the innovation;

b. Social context of the educational organization;

c. Characteristics of organizations;

d. Characteristics of individuals; and

e. Degree of acceptance, adoption, or installation.

Each of these categories are described more fully in a document entitled "Measures for Diffusion Variables" published by the Center for Vocational Technical Education.**

Given the complex nature of diffusion, it would be presumptious to believe this project could satisfy the implementation information requirements of all potential adopters of project components. Consequently, this report has provided a description of Great Falls, the Great Falls school system, a listing of components developed by the project, and a listing of project components which have been fully institutionalized. Potential adopters are urged to carefully examine these data before making adoption decisions. Full descriptions of each component listed below are included in earlier reports published by the project.

2. Component Development and Integration

Listed below are products which have been developed by the project, developed by others with assistance from project staff, or have emerged as a result of project influence.

An example of this latter might be a "career corner" in an elementary classroom by a teacher who learned about such strategies through the staff training program conducted by the project.

The pervasive nature of career education and staff activities makes it difficult to identify, in a discrete way, those products which have been fully integrated into on-going school programs as a direct result of the project. There will remain, upon termination of the project, many forms of career education which have become fully integrated components of on-going school programs. There will also be several current career education activities which will terminate with the conclusion of the project.

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* These were described as diffusion variables rather than implementation factors. The differences between implementation and diffusion are in levels of abstraction for operations, not in the basic concept. Implementation refers to how diffusion is effected.

** Kester, Ralph J. and Gallagher, John V. Selected Measures of Diffusion Variables. Center for Vocational-Technical Education, Columbus, Ohio, 1974.

Listed below are specific career education products and/or activities which can now be observed in district programs. All of them have been the result of some form, direct or indirect, of project influence. Those identified by an asterisk (*) will remain operational within the district upon termination of the project.

*- Career Information Centers
*- Community Resource Center
*- An information slide-tape about career education
*- Courses within the curriculum, including:
    * (a) Agribusiness
    * (b) Child Care Services
    * (c) Food Services
    * (d) Consumer Economics
    * (e) Library Skills
    * (f) World of Construction
    * (g) Elementary School Photography
    * (h) Magic Circle Human Development
    * (i) Career Education
    * (j) Sales & Sales Promotion
    * (k) Management
*- A special career-oriented night school program which functions both as an alternative high school and adult education program
*- Special resource collection, including field trips, resource persons and mediated materials
 - Student operated "stores"
*- Work Experience
*- Cooperative Work program
*- Materials identification, acquisition and distribution
 - Staff training in the following areas:
    (a) developing student self-awareness
    (b) increasing student career decision-making competence
    (c) increasing student awareness of, and knowledge about, careers and work
    (d) career education strategies
    (e) career education resources
*- Para-professionals and instructional aides in career education
*- Career education in Special Education
 - Placement services for:
    (a) work programs
    (b) employment upon leaving school
 - School-community relations program
*- Career component for the art curriculum
 - Mini-course program
*- Instructional Materials Catalog system
*- Adult education and G.E.D. programs

*- Interpretation of O.V.I.S. scores for better student use
*- Junior high group counseling for underachievers
- Video-tapes of curriculum offerings at Great Falls High
- Career education pamphlets

4. Model Definition

Development of a "transportable" model has been perhaps the most difficult task addressed by the project. The basic problem is one of defining a set of career-related student outcomes, and the necessary strategies to attain those outcomes, which can be inserted into operational curricula rather than imposed upon them.

At this point, the program structure presented and discussed earlier in this report would serve as the most useful "transportable model" for career education to emerge from this project. The activities and outcome areas included are derived from relevant literature and supported by their use in other career education programs. The treatments listed are those which have been designed, listed and evaluated in earlier project activities. The effectiveness of each is described in Section C of this report. To the extent that other settings are identical to the conditions which exist in the Great Falls Public Schools, similar results may be expected.

5. Dissemination

The project was not charged with specific dissemination responsibilities. However, selected sections of this report could prove valuable to other agencies implementing, or interested in, career education programs. Those sections are: A. Description of the Project; C-2. Evaluation Outcomes; and D. Project Outcomes.

Funds for such dissemination activities have not been included in project budgets.

E. GENERAL CONCLUSIONS

1. The Project

During the past three years, numerous developmental activities have resulted in products and processes of known effectiveness in achieving desired student outcomes. Each of these has been produced to satisfy a particular requirement of the model used to structure the project and identified needs within the Great Falls Public Schools.

Typical of all developmental projects, some products proved ineffectual. However, these types of "wheel spinning" activities have been held to a minimum through a comprehensive evaluation program and close management procedures.

Generally, it can be stated the project has satisfied the intents of proposals submitted and met specific requirements of the project sponsor.

2. The Program

The intensive program initiated by the project has resulted in a greatly enhanced sensitivity to career education among all district staff. For example, in the 1976 Annual Report nearly every school cited use of one or more products developed by the project. Additionally, reports from curriculum committees heavily emphasized emerging units and/or objectives related to career education.

As a result of the project, career education has become a significant facet of public school programs in Great Falls and has had an important role in enhancing, not supplanting, educational processes. Through the project, a program has emerged which reaches all levels in the schools, closely involves the community, and provides a means to make education more meaningful and relevant for all students.

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APPENDIX A

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1975-76 EVALUATION DESIGN

EVALUATION DESIGN
1975 - 1976

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SECTION I

PROJECT STRUCTURE AND ORGANIZATION

Elements of Career Education. A contemporary surge of interest in career education resulted in a proliferation of opinions about the concept and definitions for elements felt to be critical components of career education programs. The resultant ambiguity was partially clarified by a set of evaluation guidelines developed under contract by Development Associates, Inc.

However, the guidelines were necessarily general in nature and did not provide sufficiently precise definitions to operationalize an evaluation activity. Consequently, to expedite this design effort, specified elements were traced through the literature and specific definitions developed. These were subsequently ordered into the model shown in Figure 1. A complete listing of included treatments, outcome areas and activities is shown in Table 1.

Program goals and objectives, which served as the subsequent level of definition, were organized into four major categories. These were: (1) Placement; (2) Curriculum; (3) Counseling; and (4) Management. Each of these goals, and associated objectives, are listed below.

1. Placement

Goal: Develop a program which facilitates satisfactory placement of students in either employment, education or training which permits the pursuit of a career choice or meets a real or perceived economic need.

Objectives:

1.1. To insure that each student has available to him or her those services which can be used to facilitate finding satisfaction in employment upon leaving school

1.2. To insure that each student has available to him or her those services and information which can be used to facilitate making a decision concerning further education or training

1.3. To provide a service to coordinate available job openings with various work programs and those students who desire part-time employment

1.4. To identify and use resources of people, agencies, facilities, and materials located within the community

1.5. To design and implement a mechanism which coordinates utilization of community resources and maximizes their contribution to specified project needs

2. Curriculum

Goal: To facilitate integration of career education concepts into the curriculum such that each student may systematically develop those skills that enable him or her to function in the defined life roles, including but not limited to, citizenship, family, economic, and avocational.

Objectives: 2.1. To develop in each student positive attitudes toward career education concepts including the following constructs:

Personal significance of productive work
Social significance of productive work
Family
Avocational
Citizenship
Economic

2.2. To insure that each student develops the knowledge base and experiential repertoire that would enable him or her to make a satisfactory career choice upon completion of grade twelve

2.3. To insure that each student is aware of the broad range of career options open to him or her in the world of work

2.4. To provide each student with the skills necessary to continually re-assess career choice

2.5. To insure that each student perceives his or her studies as relevant to his or her career interests

2.6. To insure that each student is able to employ the career cluster concept as the unifying element of his or her school experience

2.7. To insure that each student is able to participate in those school and/or community experiences which assist him or her in identifying and evaluating his or her own interests, abilities and values

2.8. To insure that each student has the opportunity for detailed "exploration" of at least three career clusters of his or her choice

2.9. To insure that each student is provided with an opportunity for in-depth exploration of at least one career cluster

2.10. Each student will be provided with the opportunity for "specialized" preparation in a selected career cluster

3. Counseling

Goal: To develop and implement procedures that enable students to explore and understand their unique characteristics and how these characteristics relate to the defined life roles (citizenship, family, avocational, economic).

Objectives: 3.1. To insure that each student is able to acquire self-awareness of innate and acquired abilities, preferences and potentials

3.2. To insure that each student possesses the requisite skills to relate acquired self-awareness to making career decisions

3.3. To insure that each student has available to him or her information about defined roles (citizenship, family, avocational, economic)

3.4. To insure that each student has available to him or her the counseling services necessary to make curricular choices in school and educational and occupational choices when leaving school

3.5. To design and implement a mechanism which enables students to up-date, or revise, decisions made relative to selection of cluster study activities

4. Management

Goal: To develop procedures for planning, organizing, coordinating, directing, and controlling staff, project, district, and community resources to insure the adoption of project goals within the district and to facilitate transportability of the model.

Objectives: 4.1. To effect close, continued involvement of private and parochial schools in all aspects of project operations

4.2. To insure comprehensive and useful evaluation of the project by selection and employment of a project evaluation specialist

4.3. To integrate relevant aspects of existing special programs into a career education curriculum

4.4. To maximize cooperation and coordination between the project and the District Special Education Department

4.5. To define, for purposes of this project, students whose career education needs may be classified as "special"

4.6. To design and implement project components which will satisfy idiosyncratic needs of students with unique learning abilities, physical handicaps or emotional disorders

4.7. To establish an Advisory Council which can assist the project in developing its use of community resources

4.8. To define those roles for teachers, administrators and specialists which will best satisfy the goals of career education

4.9. To employ a strategy of on-site visitation by key staff for purposes of effecting diffusion and integration of key career education elements

4.10. To design and conduct necessary studies for purposes of identifying staff needs related to knowledge of career education and integration of career education concepts into the curriculum

4.11. To design and conduct those in-service and/or graduate college programs which will satisfy identified teacher needs in career education

Evaluation Objectives. Objectives which were used to structure the design and implementation of this evaluation are listed below:

1. Measure the extent to which students who have participated in the project demonstrate a change in self-awareness in grade levels 3, 6 and 9;

2. Measure the extent to which students who have participated in the project demonstrate a change in awareness of, and knowledge about, work at grade levels 3, 6 and 9;

3. Measure changes in career decision-making skills among project students at grade levels 9 through 12;

4. Measure the extent to which students who participated in the project and who left the project schools were placed in a paid occupation, in further education or in unpaid work that was consistent with their then current career choice at all grade levels by school year;

5. Measure the extent to which the number and type of job preparation opportunities (including work experience and cooperative work experience) have been expanded for young people in grades 10 through 14;

6. Design a strategy to facilitate and monitor project management including financial expenditures at each level of project emphasis (K-3; 4-6; 7-9; 10-12; 13-14) for the current year;

7. Measure the extent to which students have available to them those services which can be used to facilitate finding employment upon leaving school;

8. Measure the extent to which students have available to them those services and information which can be used to facilitate their making decisions relative to further education or training by examining student use of Career Information Centers and career counseling services;

9. Describe procedures employed to identify and use resources of people, agencies, facilities, and materials located within the community;

10. Describe procedures employed to design and implement a mechanism for coordinating utilization of community resources which maximizes their contribution to specified project needs;

11. Describe procedures employed to insure that each student is able to acquire self-awareness of innate and acquired abilities, preferences and potentials;

12. Provide those data which will facilitate determination of which activities have the potential for generalization to other settings

and which subsequently may function as components of a transportable model;

13. Design and conduct necessary studies to assess the effects of project staff development activities; and

14. Implement procedures necessary to satisfy the Guidelines for Evaluation of Career Education Programs, published by Development Associates, Inc., dated August 15, 1974.

Program Element Relationships. The interaction between student outcome areas, project activity areas and specific objectives for both the project and the evaluation are shown in the matrix included as Figure 1. Cell entries identify the types of activities planned by the project for each major outcome area.

Shown in Table 1 is the relationship between Student Outcome Areas, specific project objectives and objectives for this evaluation. Outcome areas not directly related to student performance are also included in Table 1 to facilitate data generation requirements of the evaluation design.

FIGURE 1

STUDENT OUTCOME/PROJECT ACTIVITY RELATIONSHIPS

STUDENT OUTCOME AREAS	FAMILIARIZATION (AWARENESS)			ORIENTATION			EXPLORATION			EXPERIENCE			PLACEMENT	JOB PREPARATION
	E	JH	SH	E	JH	SH	E	JH	SH	E	JH	SH		
Self-Awareness	X	X		X	X					NA	X	X		X
Basic Skills	X	X		X				X		NA	X			
Work Values	X	X			X	X		X	X	NA		X		X
Attitude/Work		X		X	X				X	NA	X			X
Knowledge/Work	X	X	X	X	X			X	X	NA	X	X		X
Career Decision Skills		X	X		X	X			X	NA	X	X	X	
Work Habits			X	X	X			X	X	NA			X	X
Obtaining Employment		X	X						X	NA		X	X	

PROJECT ACTIVITY AREAS

TABLE 1

OUTCOME AREA, PROJECT OBJECTIVE AND EVALUATION OBJECTIVE RELATIONSHIPS

OUTCOME AREA	PROJECT OBJECTIVE	EVALUATION OBJECTIVE
I. Self-Awareness	2.1 (C-D), 2.7 (A-B); 3.1, 3.2, 3.3 (D)	1. Gr. 3,6,9 10. Develop Self-Awareness
II. Basic Skills	2.2	5. Gr. 10,11
III. Awareness of Work Values	1.4, 1.5; 2.1 (B); 3.3	
IV. Awareness of/ Knowledge about Work	1.4, 1.5; 2.1 (B); 3.3	2. Gr. 3,6,9
V. Career Decision Making Skills	1.4 (C-D), 1.5; 2.4, 2.6 (F), 2.8 (F), 2.9 (F), 2.10 (F); 3.2, 3.4, 3.5(F)	3. Gr. 9-12
VI. Work Habits	2.1 (C-D-E)	
VII. Obtaining Work	1.1	
VIII. Placement	1.1, 1.2, 1.3, 1.4	4. Placement 7. Employment Procedures
IX. Continuing Education	1.3; 3.4	8. CIC & Counselor Role
X. Project Management	4.1 - 4.11	6. Fiscal Responsibility 12. Model Generalizability 13. Staff Development
XI. School Use of Community	1.4, 1.5; 2.7, 2.8	9. Identify and Use Community Resources 10. Coordinate Use of Community Resources
XII. Unclassified	4.1 - 4.11 (unspecified)	14. Evaluation Guideline Congruence

SECTION II

PRE-DESIGN INFORMATION

The pre-design phase of this evaluation focused upon delineation of project activities to be included and establishment of operational definitions for selected activities. This phase of the evaluation is designed to satisfy the published evaluation guidelines. Data and/or information obtained during this phase are used to complete several forms and/or tables specified in the guidelines. These are included as Tables 2 through 6, with the OQ/TG matrix shown in Table 7. This latter was developed using information presented in the preceding tables.

TABLE 2

TREATMENTS INCLUDED IN PROJECT ACTIVITIES

- Curricular infusion
- Career Day
- Career Information Center
    - staffed
    - not staffed
- Group counseling
- Career exploration
- World of Construction
- Career Math
- Night School
- Career education class (replaced ATS-6 demonstration)
- Career-related materials purchased by the project
- Use of career education curriculum guides
- Career education materials developed by teachers
- Job seeking/obtaining skill development
- Test interpretation
- Resource persons in the classroom
- Portable career guidance center
- Consumer Economics class (ninth grade)
- Career exphasis in Environmental Education field trips
- Career-related field trips
- C.E.E.B. "Decisions and Outcomes" program
- Vocational courses
- Graphic & print materials

TABLE 3

TREATMENT SCHOOL/GRADE IDENTIFICATION

PROJECT SCHOOL	PARTICIPATED IN		T.G.	C.G.	TESTING GR LEVEL	NO. OF CLASSES
	CE ACT	EVAL TESTING				
Collins	X	X		X	3	2
Franklin	X	X	X		6	5
Longfellow	X	X		X	3	2
Meadow Lark	X	X	X		3	2
Mountain View	X	X		X	3	2
Roosevelt	X	X		X	6	2
Russell	X	X		X	6	1
Valley View	X	X		X	6	1
East JHS	X	X	X		9	1
North JHS	X	X	X	X	9	2
C.M. Russell HS	X	X	X	X	12	2
Great Falls HS	X	X	X	X	12	2

TABLE 4

ACTIVITY TREATMENT TABLE
(GUIDELINES IV A&B)

ACTIVITY AREA	TREATMENT
1. Familiarization	
1.1 Elementary	1.1.1 Curriculum Infusion 1.1.2 Career Education Field Trips 1.1.3 Specialists in the Classroom 1.1.4 Special Career Education Materials
1.2 Junior High	1.2.1 None
1.3 Senior High	1.3.1 None
2. Career Orientation	
2.1 Elementary	2.1.1 Resource Persons
2.2 Junior High	2.2.1 Teacher-Developed Materials from Career Education class 2.2.2 Consumer Economics Class 2.2.3 Resource Persons 2.2.4 DAT/CPP
2.3 Senior High	2.3.1 Teacher-Developed Career Education Materials 2.3.2 Career Math 2.3.3 Career Information Center (GFHS)
3. Career Exploration	
3.1 Elementary	3.1.1 None
3.2 Junior High	3.2.1 Teacher-Developed Materials 3.2.2 "World of Construction"
3.3 Senior High	3.3.1 IMC Distributed materials (purchased by project)
4. Work Experience	
4.1 Elementary	4.1.1 None
4.2 Junior High	4.2.1 None

TABLE 4 (continued)

ACTIVITY TREATMENT TABLE
(GUIDELINES IV A&B)

ACTIVITY AREA	TREATMENT
4.3 Senior High	4.3.1 None
5. Placement	
5.1 Elementary	5.1.1 None
5.2 Junior High	5.2.1 None
5.3 Senior High	5.3.1 None
6. Job Preparation	
6.1 Elementary	6.1.1 None
6.2 Junior High	6.1.2 None
6.3 Senior High	6.3.1 None

TABLE 5A

ACTIVITY-TREATMENTS-PARTICIPANTS
(GUIDELINES IV C, ELEMENTARY)

* Outcome Areas:
SA = Self-Awareness
BS = Basic Skills
WK = Work Knowledge
WV = Work Values
DM = Career Decision-Making Skills
WS = Work Seeking
OS = Obtaining Skills
P = Placement
CE = Continued Education

** Activity:
F = Familiarization
CO = Career Orientation
CE = Career Exploration
WE = Work Experience
P = Placement
J = Job Preparation

OUTCOME AREA*	ACTIVITY**	TREATMENTS	PARTICIPANTS
SA	F	Most Important Person	All K
SA	F	Curriculum Infusion	All schools
SA	F	Use of DUSO Kit (1)	All schools
SA	F	Use of DUSO Kit (2)	All schools
WK	F/CO	Resource Persons	All schools
WK	CO	Field Trips	Lewis & Clark Russell Elem Longfellow Lincoln Riverview Collins Morningside Franklin Roosevelt Sunnyside
WK	CO	Career Corner/Library	Lincoln, Gr 6
WK	CO	Curriculum Infusion	Lewis & Clark, Gr 3
ALL	ALL	Special Materials	ALL

TABLE 5B

ACTIVITY-TREATMENT-PARTICIPANTS (GUIDELINES IV C; JUNIOR HIGH)

OUTCOME AREA*	ACTIVITY**	TREATMENTS	PARTICIPANTS
SA	CO	DAT/CPP	North, Gr 9
BS	CO	Portable Career Information Center	West, Grs 7, 8, 9
WK	CE	"World of Construction"	East, Gr 9, 1 class
WK	F/CO	Resource Persons/ Classroom	Selected groups Grs 7, 8, 9

TABLE 5C

ACTIVITY-TREATMENT-PARTICIPANTS (GUIDELINES IV C; SECONDARY)

OUTCOME AREA*	ACTIVITY**	TREATMENT	PARTICIPANTS
DM	CO	CEEB/Decisions & Outcomes	CMR, Gr 12 Bronson
BS	CO/CE	Career Education Library Unit	CMR, All Gr 10
WK WS/OS	CO/J	Resource Persons/ Classroom	Selected groups GFHS/CMR Grs 10, 11, 12
WK CE	CO/CE	Established CIC Staffed Career Information Center	CMR, Grs 10, 11, 12 GFHS, Grs 10, 11, 12
WK	CE	Career Exploration	CMR, Grs 11, 12 Kercher
WK	F CO CE	Special Material (Project purchased)	K-12 Selected group
WK	F CO CE	Special Material (Teacher-Developed)	K-12 selected group
WK	J/P	Voc-Ed Courses	Selected Grs 10, 11, 12 HS

TABLE 6

PARTICIPANT-TREATMENT GROUP
(GUIDELINES IV-D)

OA*	ACT**	LEVEL	TREATMENTS	PARTICIPANTS	TREATMENT GROUPS
SA	F	EL	"Most Important Person"	All Schools	
SA	F	EL	Curriculum Infusion	All Schools	
SA	F	EL	DUSO Kit 1 DUSO Kit 2		
			Special Materials:		
WK	F/CO	EL	a) Project purchase	K-6 students	
		JH		7-9 students	
		SH		10-12 students	
		EL	b) Teacher-developed	K-6 classrooms	
		JH		7-9 classrooms	
		SH		10-12 classes	
WK	F/CO	EL	Resource Persons	All K-6	
WK	F/CO	JH	Resource Persons	All 7-9	
WK	CO/J	SH	Resource Persons	All 10-12	
WK	CE	JH	"World of Construction"	Gr 9 East	Mikulecky class 1
DM	CO	SH	CEEB/Decisions & Outcomes	Gr 10 GFHS	
				Gr 12 CMR	Bronson classes 2
BS	J	SH	Career Math	Gr 10-12 GFHS	Special group
WK	CE	SH	Career Exploration	Grs 11-12 GFHS	Kercher class
			Field Trips:		
WK	CO	EL	a) Career and Environmental Educ.	Gr 4-6 all schools	All Schools
		SH	Studio Art	Gr 11-12 CMR	Kercher class

TABLE 6 (continued)

PARTICIPANT-TREATMENT GROUP
(GUIDELINES IV-D)

OA*	ACT**	LEVEL	TREATMENTS	PARTICIPANTS	TREATMENT GROUPS
			Library Study:		
WK	CO	EL	a) Study Corner	Gr K-6 Lincoln	
WK	CO/CE	SH	b) CE Library Unit	Gr 10 CMR	
WK	CO/CE	SH	c) Established CIC	Gr 10-12 CMR	Students who use Center
WK	CO/CE	SH	d) Staffed CIC	Gr 10-12 GFHS	Students who use Center
SA	CO	JH	DAT/CPP	Gr 8-9 Paris, North	
WK	F/CO	EL	Curriculum Infusion	All Schools	
WK	J/P	SH	Voc Ed courses	Gr 10-12 GFHS, CMR	Students electing Agribusiness, Food Services & Child Care
BS	CO	JH	Consumer Economics	Gr 9 all	All Gr 9
WK	CE/CO	JH	Portable CIC	Gr 7-9 West	

TABLE 7

OUTCOME QUESTION/TREATMENT GROUP
MATRIX

TREATMENT GROUP OUTCOME QUESTIONS	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
I. Increased Self-Awareness													
A. Describe abilities & limitations (no test)	X	X	X	X	X	X	X	X	X	X	X	X	X
B. Describe interests & values (no test)	X	X	X	X	X	X	X	X	X	X	X	X	X
C. Positive attitude toward self	X	X	X	X	X	X	X	X	X	X	X	X	X
D. Recognize forces influencing development													
II. Increased Academic/Vocational Skills													
A. Numerical skills (district test)											X	X	X
B. Communications skills (district test)													
C. Information processing skills (no test)											X		
D. Decision-making skills (no test)													
E. Interpersonal skills (no test)													
III. Awareness of Work Values													
A. Basis of work values													
B. Desire for paid/unpaid work													
IV. Awareness/Knowledge of Work													
A. Duties and requirements	X	X	X	X	X	X	X	X	X	X	X	X	X
B. Associated life styles	X	X	X	X	X	X	X	X	X	X	X	X	X
C. Entry requirements	X	X	X	X	X	X	X	X	X	X	X	X	X
D. Impact of social/technological change	X	X	X	X	X	X	X	X	X	X	X	X	X
E. Factors affecting success/satisfaction	X	X	X	X	X	X	X	X	X	X	X	X	X
V. Career Decision-Making Skills													
A. Interests, abilities/future success								X	X	X	X	X	X
B. Interests, abilities/life styles								X	X	X	X	X	X

TABLE 7 (continued)

OUTCOME QUESTION/TREATMENT GROUP MATRIX

OUTCOME QUESTIONS / TREATMENT GROUP	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
C. Utilize sources of information								X	X	X	X	X	X
D. Potential for advancement (no test)								X	X	X	X	X	X
E. Career planning								X	X	X	X	X	X
F. Active involvement								X	X	X	X	X	X
IV. Improved Work Habits													
A. Plan work effectively (no test)													
B. Adapt to varied situations (no test)										X			
C. Attitude toward quality in work (no test)										X			
D. Conservation of resources (no test)													
E. Personal responsibility (no test)										X			
F. Desire for continuous learning (no test)													
VII. Work Seeking/Getting Skills													
A. Sources of information											X	X	X
B. Applying for/accepting work (no test)											X	X	X
VIII. Placement													
A. Further education (no test)													
B. Paid occupations (no test)													
C. Consistent with career plans (no test)													
D. Unpaid work (no test)													
IX. Means of Continued Education													
A. Identify sources (no test)													
B. Identify support (no test)													

SECTION III

DESIGN SPECIFICATIONS

Introduction. Two strategies have been used to develop specifications for the evaluation of each objective. To satisfy the evaluation guidelines, quasi-experimental procedures have been employed where: (a) appropriate criterion tests were available; (b) treatment and comparison groups could be deliniated and manipulated; and (c) data generated could satisfy assumptions necessary to achieve desired levels of statistical rigor.

Where these criteria could be satisfied, the design specifications include hypotheses to be tested, a design configuration, description of treatment employed, sampling procedures (where appropriate), and statistical tests to be employed. In all cases, only statistics which would contribute to an understanding of the treatment effects were used. For example, in those situations where the same subjects were administered the same measure twice, a treatment by subjects design would have been most appropriate. However, the t-test for related measures has been employed as it simplified the presentation, and presumably, understanding, of the analysis.

Project objectives which did not require the use of treatment and control (comparison) groups were detailed through use of an evaluation design worksheet. These are different from those used in the guidelines in that a complete evaluation for an objective is described on a given form.

Objective Specifications. Specifications for each project objective included in the evaluation are presented in the following pages.

Objective 1: Measure the extent to which students who have participated in the project demonstrate a change in self-awareness in grade levels 3, 6 and 9.

Hypothesis: There will be a change in student self-awareness as a result of project participation.

Sample:

Grade	School	Class	n=
3 (4)	Franklin (T_1)		25
6	Franklin (T_1)		25
9	North JHS Paris Gibson JHS (T_2)		60

Design:

Level	Obs	Treatment	n=	Criterion Measure	Analysis
3	Post only	BCCI	25	S.O.S. (spring 1975)	$t_{T_1T_2}$
6	Post only	BCCI	25	S.O.S. (spring 1975)	$t_{T_1T_2}$
9	Pre Post	DAT/CPP	60	Self-Report on Abilities (p. A29 - 1975 report)	t

T_1 = 1974-75 classes (baseline)

T_2 = 1975-76 classes

Objective 2: Measure the extent to which students who have participated in the project demonstrate a change in awareness of, and knowledge about, work at grade levels 3, 6 and 9.

Hypothesis: Project participation will result in a change of knowledge about, and awareness of, work.

Sample:

Grade	Group	School	Class	n
3	Treatment	Mountain View	S. Hocevar	28
	"	Longfellow	W. Blacquiere	27
	"	Meadow Lark	M. Mitchell	21
3	Comparison	Valley View	S. Hope	27
	"	Collins	P. Linaberry	17
6	Treatment	Franklin	C. Adlophson	23
	"	Meadow Lark	T. Stevens	24
	"	Russell	M. Baumann	27
6	Comparison	Franklin	G. Stepman	24
	"	Riverview	K. Laveson	28
	"	Roosevelt	P. Senn	24
9	Selected Students	East JHS	B. Church	11

Design:

Level	Group⑥	Treatment	Design	Criterion Measure	Analysis
3	T_1	Curriculum Infusion①	pre-post	CEQ③	$t_1 \not>_{T_1 T_2}$
	T_2	None	pre-post	CEQ	t_2
6	T_1	Curriculum Infusion	pre-post	CECQ④	$t_1 \not>_{T_1 T_2}$
	T_2	None	pre-post	CECQ	t_2
9	T_3	C.E. Class②	pre-post	CMI⑤	t_3

Notes:
1. Curriculum Infusion defined as a teacher who has completed the career education in-service training program.
2. A special class being conducted this year. A diary/log of the class will be kept for descriptive purposes.
3. Career Education Questionnaire
4. Career Education Cognitive Questionnaire
5. Career Maturity Inventory
6. T_1=trained teacher; T_2=non-trained teacher; T_3= regular

Objective 3: Measure changes in career decision-making skills among project students at grade levels 9-12.

Hypothesis: Project participation will have no significant effect upon students career decision-making ability.

Sample:

Grade	Group	School	Class	n
9	Treatment (T_1)	(5 wk Consumer Econ class) North JHS	Larson	25-30
	Treatment	(Career Education class) East JHS	Church	11
12	Treatment	Great Falls HS	Bronson	27
	Comparison	Great Falls HS	Random Sample	25
9	Comparison(T_2)	North JHS	Random Sample	25
	Comparison	East JHS	Random Sample	25

Design:

Level	Group①	Treatment	Design	Criterion Measure	Analysis
12	T_1	CEEB Decisions & Outcomes (Bronson)	Pre-post	CDI	$t_{T_1T_2}$
	T_2	None	Post only	CDI	
9	T_1	Career Education Class (Church)	Pre-post	CMI	$t_{T_1T_2}$
		Career Education in Cons. Econ Class (Larson)	Post only		
	T_2	None (use "pre" group from 1975 on CMI/ATS-6; see 1975 report, p. 36-37)		CMI	

Notes: 1. T_1=treatment group; T_2=comparison group

Objective 4: Survey work-experience program students to determine how present job relates to perceived career goals.

Hypothesis: There will be no discrepancy between students career goals and their placement through the Great Falls work experience program.

Sample: All students who participated in the work experience program between October 1, 1975 and April 1, 1976.

Design:

A. Data required:

   1. Description of work experience program, including:
      a. procedures for identifying work stations;
      b. procedures for recruiting work stations;
      c. criteria for selection of students for program;
      d. criteria for placing students; and
      e. outcomes sought as a result of placement in a work experience site.

   2. Inventory of all available work experience sites;

   3. List of work experience stations (sites) used;

   4. List of all students who were placed in a work experience site;

   5. Responses to questionnaire from all students included in the sample.

B. Instrumentation: questionnaire, locally developed.

C. Analysis:

   1. Program description;

   2. Participant demography (description);

   3. Congruence between goals and placement (description);

   4. Student perceptions of benefits derived from work experience program.

EVALUATION DESIGN WORKSHEET

EVALUATION OBJECTIVE: #5 - Describe the degree of expansion of job preparation opportunities (vocational education, work experience, cooperative work) in grades 10-14.

INFORMATION REQUIRED		DATA COLLECTION		DATA ANALYSIS		DATA REPORTING		
Information	Source	Observation/ Measure	Schedule	Reduction	Analysis	When	To Whom	By Whom
1. Vocational Education courses 74-75	Voc-Ed Tchr	Record	6/1/76	List	--	final		
2. Students participating in work exp. 74-75	Proj Staff	Record	6/1/76	List	Distr Sta. x students	final		
3. Number coop work stations avail/used	Proj Staff	Record	5/15/76	List	Distr Sta. x stu x use			
4. Changes in coop/ work stations	Proj Staff	Record	5/15/75	List	Sig'nce of differences	final		
5. Description of procedure used to identify coop work stations	W/Exp Coord	Questionnaire	6/1/76	Descr.	--	final		
6. Description of total coop and work experience program for grades 9-12	Proj Staff	Quest/Interview	6/1/76	Descr.	--	final		

EVALUATION DESIGN WORKSHEET

EVALUATION OBJECTIVE: #5 - continued

INFORMATION REQUIRED		DATA COLLECTION		DATA ANALYSIS		DATA REPORTING		
Information	Source	Observation/ Measure	Schedule	Reduction	Analysis	When	To Whom	Whom
7. Project use of community resources in establishment of coop work stations	Proj Staff	Quest/Interview	6/1/76	Descr.	--	final		
8. Number of students in work release program	Proj Staff	Record	6/1/76					
9. Voc Ed & project staff liaison for:								
a. Course Development	Director	Questionnaire	5/15/76	Descr.	--	final		
b. Program Articulation	Director	Questionnaire	5/15/76	Descr.	--	final		
c. Program Development	Director	Questionnaire	5/15/76	Descr.	--	final		

Objective 6: Monitor financial expenditures at each level of emphasis.

PROJECT BUDGET REPORTS

EXPENDITURES	LEVEL OF EMPHASIS					TOTAL
	K-6	7-12	7-9	10-12	K-12	
Personnel						
Professional Salaries						
Clerical Salaries						
Employee Benefits						
Travel						
Supplies & Materials						
Communications						
Services						
Equipment						
TOTALS						

Objective 7: Measure the extent to which students have available to them those services which can be used to facilitate their finding employment upon leaving school.

Design:

1. Describe all placement services available to students;

2. Administer questionnaire to working students who have left school to identify availability and usefulness of placement services.

Data Required:
Required:

1. List of placement services available, including:
    a. name;
    b. location (address);
    c. services offered;
    d. fees charged;
    e. affiliation (government agency);
    f. hours of operation;

2. Working students (n=30) to complete locally developed questionnaire.

Analysis:

1. Frequency of student use of each service available;

2. Description of student perceptions of:
    a. adequacy of number of services available;
    b. usefulness of services employed;
    c. adequacy of service availability;
    d. general satisfaction with placement program;

3. Description of students who used placement services; and

4. Description of placement services available to students.

EVALUATION DESIGN WORKSHEET

EVALUATION OBJECTIVE: #8 - Examine students' use of Career Information Center to facilitate making career decisions.

INFORMATION REQUIRED		DATA COLLECTION		DATA ANALYSIS		DATA REPORTING		
Information	Source	Observation/ Measure	Schedule	Reduction	Analysis	When	To Whom	To Whom
1. Description of:								
a. CIC content	CIC Dir.	Records	6/1/76	Categories	--	final		
b. Procedure for student use of CIC	CIC Dir.	Questionnaire,	6/1/76	Description	--	final		
c. Frequency of counselor referral to CIC	Counselor	Questionnaire page 47	6/1/76	Description	--	final		
d. Student perception of CIC value in career decision-making	Gr 11-12 students	Questionnaire	6/1/76	Description	--	final		
2. Frequency of student use of CIC								
a. Grade x career choice x sex	students who use CIC	Questionnaire	6/15/76	Frequency Distribution	--	final		

EVALUATION DESIGN WORKSHEET

EVALUATION OBJECTIVE: #8 - continued

INFORMATION REQUIRED		DATA COLLECTION		DATA ANALYSIS		DATA REPORTING		
Information	Source	Observation/ Measure	Schedule	Reduction	Analysis	When	To Whom	To Whom
b. Due to counselor referral	students who use CIC	Questionnaire	6/15/76	Frequency Distribution	--	final		
c. Free/indicated choice	students who use CIC	Questionnaire	6/15/76	Frequency Distribution	--	final		
d. "Other" referral	students who use CIC	Questionnaire	6/15/76	Frequency Distribution	--	final		
3. Description of materials usage (frequency of use)	CIC Dir.	Records	6/1/76	Frequency Distribution	--	final		
4. Effects of CIC use on:								
a. Finding a job	students who use CIC	Questionnaire	6/15/76	Frequency $^{\text{yes}}_{\text{no}}$	Correlation with referral and with usage	final		
b. Career decision	students who use CIC	Questionnaire	6/15/76	Frequency $^{\text{yes}}_{\text{no}}$		final		

EVALUATION DESIGN WORKSHEET

EVALUATION OBJECTIVE: #9 - Describe procedures employed to identify and use resources from the community; and #10 - Describe procedures used to facilitate use of the Community Resource Center.

INFORMATION REQUIRED		DATA COLLECTION		DATA ANALYSIS		DATA REPORTING		
Information	Source	Observation/ Measure	Schedule	Reduction	Analysis	When	To Whom	To Whom
1. Frequency of requests at CRC	CRC	Records	5/15/76	List	Avail x Requests	final		
2. List of community resources inventoried	CRC	Records	5/15/76	List	--	final		
3. Description of procedures used to add resources	Proj Staff	Interest Questionnaire	6/1/76	Description	--	final		
4. History/background of CRC	Proj Staff	Interest Questionnaire	6/1/76	NA	NA	final		
5. Types of resources inventoried	CRC Staff	Records	5/15/76	Categories	--	final		
6. Services provided by CRC to effect use of community resources	CRC Staff	Questionnaire	5/15/76	List	--	final		

Basic Questions: 1. How are community resources located? 2. What is available?
3. How do people get them? 4. How often are they used?

SECTION IV

DESIGN SUMMARIES

Introduction. The Guidelines for Evaluation of Career Education programs, prepared by Development Associates, Inc., emphasize three questions that should be answered in any "treatment-outcome" evaluation.* These are:

1. How do the experiences (treatments) for treatment and comparison groups differ?
2. How do the outcomes (products) for treatment and comparison groups differ?
3. How do treatments relate to student outcomes (when there are outcome differences between treatment and comparison students)?

The design strategy proposed by the Guidelines uses these types of questions as the basis for a decision structure to be used by both the project and the evaluation. In accord with the strategy, one question of each type (Outcome, Treatment, Relational) should be formulated for each outcome area-treatment addressed by the project.

In this project, it has proven more feasible to cluster these questions by treatment groups, rather than outcome areas, since several treatment groups are included in a given outcome area. This procedure has enhanced the "summary" intent of the worksheets.

It should also be noted that these summaries focus only upon student outcome areas while project objectives focus upon: (1) student outcomes; (2) related project activities (to insure attainment of desired student outcomes; and (3) project management. Design summaries, because of their constricted focus, have been prepared only for the first category/type of objective.

Design summaries for each treatment group used, in each outcome area, are presented on the following pages.

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* Draft Guidelines for Evaluation of Career Education Programs. Development Associates, Inc.; Washington, D.C., August 15, 1974; p. 51.

EVALUATION DESIGN SUMMARY

Treatment Group(s): Grades 3 and 6, Franklin

Treatment: B.C.C.I.

Outcome Area	Evaluation Questions	Design	Data Source	Criterion Instrument	Sample	Analysis
1. Self-Awareness	Outcome (I-A) Have students increased their ability to describe their own abilities and limitations?	Pre-post	B.C.C.I.	S.O.S.	Randomly selected classes, n=30	F; treatments by subjects design
	Treatment A. How many hours were spent in administraton of the B.C.C.I.?	Record of hours	Teacher	Log	same as above	Frequency Distribution
	B. How many hours were spent in use of B.C.C.I. data?	Record of hours	Teacher	Log	same as above	same as above
	Relational A. What relationship exists between hours of use of B.C.C.I. data and student performance on the S.O.S.?	Correlation	Records		same as above	Correlation (r)

EVALUATION DESIGN SUMMARY

Treatment Group(s): Grade 9, Paris Gibson and North Junior High Schools

Treatment: D.A.T. with Career Planning Program

Outcome Area	Evaluation Questions	Design	Data Source	Criterion Instrument	Sample	Analysis
I. Self-Awareness	Outcome I-A) A. Is there any increase in students' ability to describe their own abilities and limitations?	Pre-post	Gr 9 students	Self-report of abilities	Randomly selected intact class	Treatments by subject
	Treatment A. How many group sessions were held to interpret the DAT/CPP?		Record	Log	same as above	Frequency Distribution
	B. How many individual sessions for each student?		Record	Log	same as above	Frequency Distribution
	Relational A. What is the relationship between hours of counseling using DAT/CPP data bases and self-report of student abilities?					Correlation (r)

EVALUATION DESIGN SUMMARY

Treatment Group(s): Grades 3 and 6, Mountain View, Longfellow, Meadow Lark

Treatment: Curriculum Infusion

Outcome Area	Evaluation Questions	Design	Data Source	Criterion Instrument	Sample	Analysis
IV. Awareness of and Knowledge About Work	Outcome (I-A) Has there been a change in student awareness of, and knowledge about, Work?	Pre-post	Student test	C.E.Q.	Classes of 3 teachers trained in C.E. and 3 teachers not so trained.	1. Treatments by subjects for treatment groups 2. t_i for treatment comparison group post-test scores
	Treatment To what extent do teachers who have completed a C.E. course use C.E. methods more than teachers who have not?	Frequency of use of C.E. methods	Teachers	Quest.	same as above	t_i
	Relational What relationship exists between frequency of use of C.E. methods and student awareness of, and knowledge about, work?	Correlation	Record	NA	same as above	Correlation (r)

EVALUATION DESIGN SUMMARY

Treatment Group(s): Grade 9, East Junior High School

Treatment: Special Career Education Course

Outcome Area	Evaluation Questions	Design	Data Source	Criterion Instrument	Sample	Analysis
IV. Awareness of and Knowledge About Work	Outcome (A-E) Has there been a change in student awareness of, and knowledge about, work?	Pre-post	Student test	C.M.I.	Intact class	treatments by subjects
	Treatment What specific course strategies speak to the outcome desired? To what extent have these strategies been validated?	NA	Quest.	NA	same as above	AMCOVA
	Relational What is the relationship between successful completion of the course and an increase in the specified outcome area?	NA	Record	NA	same as above	Correlation (r)

EVALUATION DESIGN SUMMARY

Treatment Group(s): Grade 12, Great Falls High School

Treatment: C.E.E.B.: Decisions & Outcomes

Outcome Area	Evaluation Questions	Design	Data Source	Criterion Instrument	Sample	Analysis
V. Increase in career Decision-Making skills	Outcome (A, B, F) Have students increased in their ability to use information about themselves and occupations in making career decisions?	Pre-post; Comparison	Student test	C.D.I.	2 classes at GFHS	t_i for post-tests treatments by subjects
	Treatment How many hours were directed to use of the C.E.E.B. materials? Were they used as prescribed?	Tally of hours of use; Interview	Teacher	Log; Quest.	NA	Description
	Relational What relationship exists between hours spent in use of the C.E.E.B. materials and an increase in student career decision-making ability?	NA	Record	NA	NA	Correlation (γ)

EVALUATION DESIGN SUMMARY

Treatment Group(s): Grade 9, North and East Junior High Schools, Course in Consumer Economics

Treatment: A special Career Education unit nested within the course

Outcome Area	Evaluation Questions	Design	Data Source	Criterion Instrument	Sample	Analysis
V. Increase career decision-making skills	Outcome (A,B,F) Have students increased in their ability to use information about themselves and occupations in making career decisions?	Pre-post; post only	Student test	C.M.I.	2 selected classes at each school	treatments by subjects t_1 for post tests
	Treatment To what extent has the special unit been validated? In what specific context was it used? What special materials are acquired?	NA	Teacher Interview	Quest.	NA	Description
	Relational What relationship exists between student completion of the C.E. unit and increased career decision-making capability?	NA	Record	NA	NA	Correlation (r)

SECTION V

DATA COLLECTION

Introduction. Three types of data will contribute to this evaluation. They are: (1) standardized and/or recommended tests; (2) questionnaires; and (3) selected elements of record data. Specific strategies for use of each data generation method are described below. The schedule for data collection and analysis was described in the design specifications.

Standardized Tests. Tests to be employed for this evaluation are listed below:

TESTS EMPLOYED

TEST	Evaluation Objective	Outcome Area	Grade Level
Self Observation Scales	1	I	3 & 6
Career Education Questionnaire	2	IV	3
Career Education Cognitive Questionnaire	2	IV	6
Career Maturity Inventory	2	IV	9
Career Development Inventory	3	IV	12
Differential Aptitude Test/CPP	1	I	9
Barclay Classroom Climate Inventory	1	N/A	3 & 6

Questionnaires. Several questionnaires are necessary to obtain information and/or data required to satisfy the design specifications. Questionnaires to be employed, and the purpose for their use, are described below.

QUESTIONNAIRES EMPLOYED FOR THE EVALUATION

Respondent(s)	Eval. Obj.	Purpose/Focus
Work Experience Students	4	To determine the degree of congruence between present job and perceived career goals
Co-op Work Coordinators	5	Identify the extent to which the number and type of job preparation opportunities have been expanded
Students NOT enrolled in co-op or work experience programs	7	Identify the extent to which students find available placement service of value and the extent to which each type available is used
Students who use the Career Information Center	8	Perceptions of Career Information Center value in career decision processes
Career Information Center Director	8	Inventory of Career Information Center resources; procedures for student use of Career Information Center
Teachers who have taken a Career Education course	13	Determine the extent to which the use of Career Education strategies is retained

Record Data. These types of data are those which do not require special instrumentation other than a recording format. They are routinely generated during the course of developmental projects. A complete listing of record data for this evaluation if presented below:

RECORD DATA WHICH CONTRIBUTED TO THE EVALUATION

Eval. Obj.	Source	Description
4	Staff	- Description of work experience program - Inventory of available work experience sites - List of work experience stations used - Listing of students placed in work experience
5	Staff	- Number of job sites available for work experience and cooperative work programs - Description of vocational education courses available - Number of job sites used for work experience and cooperative work programs, 1975-76 - Inventory of Community Resource Center materials
6	Project Director	- Financial report for 1975-76
7	Staff	- List and description of placement services available to subjects (present and former)
8	Staff	- Inventory of Career Information Center materials - Total hours of student CIC use
9	Center Staff	- Number of requests for service received at the Community Resource Center - List of community resources inventoried - Description of procedure for teacher use of community resources
12	District Staff	- Description of each of the following project-developed components: CIC, CRC, in-service training course, counselor roles, curriculum units, special materials development procedure, work programs, and placement programs

SECTION VI

REPORTING

Audiences. Two primary audiences will be served by this evaluation, project staff and the project sponsor. Information provided project staff will be oriented toward facilitating qualitative improvements in operational decision processes. Information provided the project sponsor will focus upon: (1) identification of model components which can generalize to other settings; and (2) description of the effects of specified treatments.

Reports. Quarterly accomplishment reports will be filed which describe: (1) work completed; (2) work to be completed in the next quarter; (3) problems encountered; and (4) congruence of work accomplished and proposed schedule.

A final report will be published upon completion of the evaluation, generally following the outline shown below:

FINAL EVALUATION REPORT

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I. Summary ....
II. Evaluation Procedures ....
    a. Purpose ....
    b. Data Generation ....
    c. Design Summary ....
        1. Outcome Question/Treatment Group Matrix ....
        2. Objective Specifications ......
III. Report of Evaluation Data ....
IV. Conclusions and Recommendations ....

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EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Counselors
Form I

Personal Information

1. Your age:

☐ 21 - 25
☐ 26 - 30
☐ 31 - 35
☐ 36 - 40
☐ 41 - 45
☐ 46 - 50
☐ 51 - Over

2. Your sex:

☐ Female
☐ Male

3. Years in Great Falls:

☐ 1 - 3
☐ 4 - 6
☐ 7 - 9
☐ 10 - 12
☐ 13 - Over

4. Marital status:

☐ Single
☐ Married
☐ Divorced
☐ Separated

Professional Information

5. Which of the following best describes your present level of college training in terms of degree(s) and quarter hours?

☐ BA + 15 hours
☐ BA + 30 hours
☐ MA
☐ MA + 15 hours
☐ MA + 30 hours
☐ MA + 45 hours
☐ Doctorate

6. Please list the last four positions you have held in education.

Position	Years Held	Nature of Work

7. Major professional goals:

(a) ____________________

____

(b) ____________________

____

(c) ____________________

____

8. Are you aware of the Career Education Project currently operational within the district?

☐ Yes

☐ No

9. How do you--in your own work or for your own purposes--define "Career Education" and how do you believe it should be manifes in the schools?

(a) definition: ______________________________

____

____

(b) operational manifestations: ______________________________

____

____

10. Are you aware of a defined role for counselors in the project?

☐ Yes

☐ No

If no, would you like to have a defined role?

☐ Yes ☐ No

If yes, please complete the following:

(a) Describe the defined role: ______________________________

____

(b) Is this definition congruent with your own expectations (desires)?

☐ Yes ☐ No If no, how is it different? ____

____

____

11. What kinds of activities have you initiated, relative to your concept of career education, during this past year?

	Activity	Description/Purpose
(a)		
(b)		
(c)		
(d)		

12. Have you conducted any "group counseling" sessions/activities to further the concept of career education?

☐ Yes

☐ No

→ If yes, how many?______ Would you describe these sessions, generally, as:

☐ useful ☐ productive

☐ successful ☐ meaningless

☐ to students
☐ to you

☐ relevant

What major benefits to students do you feel derived from these group counseling sessions?

____

____

13. What do you perceive as your role in relation to career education placement for each of the following?

☐ I don't know what placement means.

(a) Work experience:____

____

(b) Cooperative work program:____

____

(c) Job placement:____

____

(d) Academic placement:____

____

14. In your opinion, who should be primarily responsible for initiation and maintenance of career education activities?

(a) Initiation

☐ teachers ☐ project staff ☐ other (please
☐ counselors ☐ administration specify:_________)

(b) Maintenance (on-going operations/program):

☐ teachers ☐ project staff ☐ other (please
☐ counselors ☐ administration specify:_________)

15. To what extent are you aware of each of the following career education placement activities (programs) conducted within the community?

	Know the program well	Know about the program	Not aware of this program
(a) Coop work experience	☐	☐	☐
(b) Career Interest Survey	☐	☐	☐
(c) New course in sales and sales promotion	☐	☐	☐
(d) New course in management	☐	☐	☐
(e) Other (specify:_____ ___________________	☐	☐	☐

16. Are you aware of the various training programs which the project has sponsored this past year?

☐ Yes

☐ No

→ If yes, have you participated in any of them?

☐ Yes

☐ No

If yes, please name those in which you have participated:

____

____

17. What do you perceive as the Counselor's role in relation to each of the following:

(a) drop-out problems

(1) presently:_______________________________________

____

(2) desired/future: ______________________________

____

(b) support of teachers

(1) presently: ______________________________

____

(2) desired/future: ______________________________

____

(c) curriculum design

(1) presently: ______________________________

____

(2) desired/future: ______________________________

____

(d) student work and/or study placement

(1) presently: ______________________________

____

(2) desired/future: ______________________________

____

(e) dissemination of career education information

(1) presently: ______________________________

____

(2) desired/future: ______________________________

____

18. What factors do you believe are, or should be, included in a student's ability to make quality career decisions?

(a) ______________________________

____

(b) ____

____

(c) ____

____

What role do you feel counselors should play in facilitating a student's career decision?

____

____

19. What strategies do you feel would be most effective in facilitating a student's making quality career decisions?

____

____

____

20. In what types of activities have you been engaged during this past year which would facilitate a student's acquiring a self-awareness of innate and acquired abilities, preferences and potentials?

(a) innate abilities: ______________________________

____

(b) acquired abilities: ____________________________

____

(c) preferences: __________________________________

____

(d) potentials: ___________________________________

____

(e) none of these ☐

21. In what ways have you been able to facilitate students relating acquired self-awareness to making a career decision?

(a) none ☐

(b) ____

____

(c) ____

____

(d) ____

____

22. What kinds of information have you provided students relative to their life roles of

(a) citizenship: ____________________________________

____

(b) family: ____

____

(c) avocational: ____________________________________

____

(d) economic: ______________________________________

____

23. What kinds of counseling services have you provided students during this past year relative to:

(a) selection of courses, design of an academic program:

____

(b) their making continuing (after high school) plans:

____

(c) their making a decision about a career upon leaving high school:

____

____

(d) none of these ☐

24. Approximately what percentage of your time is devoted to each of the following:

(a) student counseling (individual): ____________________

(b) student counseling (group): ____________________

(c) student testing: ____________________

(d) non-counseling activities: ____________________

(Please list several of these: ____________________

____)

(e) professional development (self): ____________________

(f) professional development (others): ____________________

(g) parent conferences: ____________________

(h) teacher conferences: ____________________

(i) other (specify: ____________________)

25. Given complete freedom of choice about what you did as a counselor, what percentage of your time would you devote to each of the following:

(a) individual student career counseling: ____________________

(b) group student career counseling: ____________________

(c) administration of tests: ____________________

(Name three tests you would like to give: ____________________

____)

(d) others (specify: ____________________ ____________________)

26. Do you personally, or in your office, keep a file of local jobs available for students?

☐ Yes

☐ Personally
☐ Office File

☐ No

→ If yes, approximately how many jobs are typically on file?

☐ 0 - 4 ☐ 11 - 15
☐ 5 - 10 ☐ 16 or more

27. Do you assist students to select from among available jobs?

☐ Yes

☐ No

→ If yes, in what ways?________________________________

____

28. Do you openly serve as a facilitator of student employment by responding to employers requests for student employees?

☐ Yes

☐ No

→ If yes, approximately how many calls per week do you receive from employers?

☐ None ☐ 4 - 6 ☐ 10 or more
☐ 1 - 3 ☐ 7 - 9

Is the frequency of calls about the same throughout the school year?

☐ Yes

☐ No

→ If no, during what part of the year do you receive the most calls?

☐ fall ☐ winter ☐ spring

29. How do you feel about providing job placement services for students?

☐ Fine, it should be a part of counselors' responsibilities.

☐ I do it because it is expected.

☐ I do it because no one else offers this service.

☐ I don't like it at all.

Comments: ____

____

____

30. Do you provide an "aptitude" counseling service, i.e., do you give any interest or aptitude tests and subsequently interpret these for students?

☐ Yes, I give the following tests: (a) ____________________

(b) ____________________

(c) ____________________

☐ No, I don't give any tests.

31. Do you ever discuss a student's potential for various jobs without test data available?

☐ Yes

☐ No

→ If yes, what is the nature of such counseling sessions, i.e.,

(a) What do you discuss? ______________________________

____

(b) How do you determine the student's aptitudes?

____

(c) Is this a preferred counseling strategy?

☐ Yes ☐ No If no, what would you prefer?

____

____

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana 59403
1974

Evaluation Questionnaire

Counselors
Form II

Listed below are several concepts which may be considered components of a Career Education Curriculum. For each concept, would you please answer four questions by checking the appropriate space(s):

1. Should the concept be included in a career education curriculum?

2. How important is the concept?

3. To what extent can the concept presently be observed in the curriculum?

4. To what extent, or degree, should you be responsible for assisting students to attain this concept?

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students be familiar with the values of a work-oriented society.												
Students accept the values of a work-oriented society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students find work both meaningful and satisfying.												
Students understand work as effort which produces benefit to self and others.												
Each student understands and accepts himself.												
Through understanding and acceptance of self, the student is able to live effectively in society.												
Each individual is able to resolve his concerns.												
Each student possesses information about his innate and acquired abilities, capabilities, preferences, and potentials.												
Each student possesses knowledge about specific occupations.												
Students who so desire may become prepared for employment in a specialized job area.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Each student develops an "acceptable" job attitude.												
Each student is familiar with occupational classifications.												
Each student is aware of relevant factors to be considered in career decision making.												
Students are capable of effective occupational planning.												
Students manifest career awareness as demonstrated by their knowled about available career options.												
Students are able to utilize career information in cluster exploration experiences.												
Students are able to use knowledge about career concepts in the process of making career decisions.												
Students are capable of independent learning.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students are able to relate studies within the general curriculum to their career interests.												
Students are able to exercise responsible judgement in career planning and choice.												
Each student understands his family, avocational, citizen, and economic roles in life.												
Each student is capable of utilizing information gained from work observation in learning about careers, expanding his knowledge about available career options, and in making career choices.												
Provide those experiences which will enable students to ultimately find meaningful, satisfying work.												
Design and provide those experiences which will enable each student to understand himself, accept himself, and live effectively in society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide those services which will enable students to acquire information about their innate and acquired abilities, capabilities, preferences, and potentials.												
Establish those services and experiences which will enable each student to acquire information about the world of work.												
Design and provide those experiences which enable students who so desire to prepare for a specialized job area.												
Facilitate student's understanding the importance of re-training or up-grading of occupational skills.												
Insure that each student is able to acquire desired occupational skills.												
Provide cooperative work experiences for those students who elect to participate in such experiences.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide opportunities for students to explore "key" occupational areas.												
Establish a career education continuum, progressing from career awareness through exploration of occupations to development of occupational skills.												
Establish and operate career information centers for student use.												
Provide in-service training for professional staff in the area of career education.												
Provide a program of work experience as a student option.												
Provide a program of work observation as a student option.												

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Teachers Form I

1. What is the grade level of the majority of students you teach?

☐ 1 - 3
☐ 4 - 6
☐ 7 - 9
☐ 9 - 10
☐ 11 - 12
☐ 9 - 12

2. Check the box which best describes your major teaching assignment.

☐ Self-contained
☐ Science
☐ Mathematics
☐ Social Studies (not a foreign language)
☐ Other (please specify: ____________________)

3. What is your age?

☐ 20 - 30
☐ 31 - 40
☐ 41 - 50
☐ 51 - 60
☐ 61 - Over

4. Your sex?

☐ Female
☐ Male

5. Which of the following best describes the grade levels included in your school?

☐ 1 - 6
☐ 7 - 9
☐ 10 - 12

6. Years in Great Falls?

☐ 1 - 3
☐ 4 - 6
☐ 7 - 9
☐ 10 - 12
☐ 13 - Over

7. Which of the following best describes your present level of college training in terms of degree(s) and quarter hours?

- ☐ Bachelor Degree
- ☐ Bachelor + 15 hours
- ☐ Bachelor + 30 hours
- ☐ Master's Degree
- ☐ Master's + 15 hours
- ☐ Master's + 30 hours
- ☐ Master's + 45 or more

8. Please list the last four positions you have held in education.

Position	Years Held	Nature of Work

9. How would you define "career education" for the Great Falls schools?

____

____

____

10. What role do you perceive for yourself in the development and integration of the career education concept you described? (Check all appropriate spaces.)

- ☐ Curriculum development
- ☐ Developing new instructional strategies
- ☐ Developing strategies to integrate career education
- ☐ Counseling students
- ☐ Reorganizing curricular patterns
- ☐ Other (please specify: ______________________________
____)

11. In what ways do you feel "career education" is different from or the same as what you have done in the past? (Check all appropriate spaces)

Different		Similar/Same As
☐	Curricular relevance	☐
☐	Increased self-awareness	☐
☐	More direct work experience	☐
☐	Greater awareness of career opportunities	☐
☐	Increased level of occupational skill	☐
☐	Other (please specify: ______________)	☐
☐	Other (please specify: ______________)	☐

12. In what ways do you believe career education is different from vocational education?

	Career Education	Vocational Education
(a)	______________________	______________________ ✓
	______________________	______________________
(b)	______________________	______________________
	______________________	______________________
(c)	______________________	______________________
	______________________	______________________

☐ I believe they are the same--or very similar.
☐ I don't know--but would like to know.

13. What implications does a career education curriculum (program) have for you:

(a) Personally

(1) None ☐
(2) ____

____

(3) ______________________________

____

(b) Professionally

(1) None ☐

(2) ______________________________

____

(3) ______________________________

____

14. Have you perceived, or suggested for purchase, any materials for the specific purpose of potential adoption/acquisition to foster career education in the curriculum?

☐ Yes

☐ No

→ If yes, what types of materials?

☐ films
☐ film strips
☐ audio tapes
☐ other (please specify: ____________________)

What procedure was employed to inform you about materials available for preview?

☐ I was asked to look at specific materials.
☐ I saw a brochure in the district.
☐ I was sent a brochure.
☐ A colleague mentioned these materials to me.
☐ I saw it (them) at the Career Education office.
☐ A project staff member told me about it (them).
☐ Other (please specify: ____________________).

15. Have you participated or enrolled in either in-service training or college courses related to career education?

☐ Yes

☐ No

→ If no, please answer the following questions:

(a) Were you aware of programs offered?

☐ Yes ☐ No

(b) If you were aware of these programs, but did not enroll, was there a specific reason?

☐ Yes ☐ No

→ If yes, what: ______________________

____

(c) Are there any programs which you feel are needed but not offered?

☐ Yes ☐ No

→ If yes, please name the programs you feel are needed:

____

____

____

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana 59403
1974

Evaluation Questionnaire

Teachers
Form II

Listed below are several concepts which may be considered components of a Career Education Curriculum. For each concept, would you please answer four questions by checking the appropriate space(s):

1. Should the concept be included in a career education curriculum?

2. How important is the concept?

3. To what extent can the concept presently be observed in the curriculum?

4. To what extent, or degree, should you be responsible for assisting students to attain this concept?

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students be familiar with the values of a work-oriented society.												
Students accept the values of a work-oriented society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
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Provide those experiences which will enable students to ultimately find meaningful, satisfying work.												
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Facilitate student's understanding the importance of re-training or up-grading of occupational skills.												
Insure that each student is able to acquire desired occupational skills.												
Provide cooperative work experiences for those students who elect to participate in such experiences.												

	1		2			3			4			
	Part of a Career Education Curriculum?		How IMPORTANT is this concept?			To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
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Provide a program of work experience as a student option.												
Provide a program of work observation as a student option.												

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Teachers Form III

1. What is the grade level of the majority of students you teach?

☐ 1 - 3
☐ 4 - 6
☐ 7 - 9
☐ 9 - 10
☐ 11 - 12
☐ 9 - 12

2. Check the box which best describes your major teaching assignment.

☐ Self-contained
☐ Science
☐ Mathematics
☐ Social Studies
☐ Language Arts (not a foreign language)
☐ Other (please specify:____________________________)

3. What is your age?

☐ 20 - 30
☐ 31 - 40
☐ 41 - 50
☐ 51 - 60
☐ 61 - Over

4. Your sex?

☐ Female
☐ Male

5. Which of the following best dexcribes the grade levels included in your school?

☐ 1 - 6
☐ 7 - 9
☐ 10 - 12

6. Years in Great Falls?

☐ 1 - 3
☐ 4 - 6
☐ 7 - 9
☐ 10 - 12
☐ 13 - Over

7. Which of the following best describes your present level of college training in terms of degree(s) and quarter hours?

☐ Bachelor Degree
☐ Bachelor + 15 hours
☐ Bachelor + 30 hours
☐ Master's Degree
☐ Master's + 15 hours
☐ Master's + 30 hours
☐ Master's + 45 or more hours
☐ Doctorate

8. Please list the last four positions you have held in education.

Position	Years Held	Nature of Work

9. During recent years there has been considerable emphasis upon the concept "Career Education." What does this concept (Career Education) mean to you?

____

____

____

10. In what ways do you believe the concept you defined could best be incorporated into the curriculum?

(a) ____

(b) ____

(c) ____

Please continue to the next page

11. Do you presently include Career Education in YOUR program?

☐ Yes

☐ No

→ If Yes, in what ways? ______________________________

____

____

What types of support services for Career Education instruction:

(a) Do you NEED: ______________________________

____

(b) Would you LIKE to have: ______________________________

____

12. In what ways do you feel Career Education is different from general education?

(a) ______________________________

(b) ______________________________

(c) ______________________________

(d) ______________________________

☐ I believe they are the same

☐ I don't know

☐ I haven't thought about this issue

13. In what ways do you feel Career Education is different from Vocational Education?

(a) ______________________________

(b) ______________________________

(C) ______________________________

(d) ______________________________

☐ I believe they are the same

☐ I don't know

☐ I haven't thought about this issue

14. Would you like to learn more about Career Education?

☐ Yes

☐ No

If Yes, which method would be most effective:

- ☐ In-service program
- ☐ Formal courses
- ☐ Reading lists
- ☐ Special brochures
- ☐ Other (please specify:______________________)

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Administration
Form I

A. Please check the space which describes your present position.

☐ elementary principal
☐ junior high principal
☐ other (specify:________________________________)
☐ high school principal
☐ central administration staff

B. For how many years have you held your present assignment?

☐ 1 - 3
☐ 4 - 6
☐ 7 - 9
☐ 10 or more

C. For how many years have you been associated with the Great Falls Public Schools?

☐ 1 - 3
☐ 4 - 6
☐ 7 - 9
☐ 10 or more

D. What is your present age?

☐ 25 or younger
☐ 26 - 30
☐ 31 - 35
☐ 36 - 40
☐ 41 - 45
☐ 46 - 50
☐ 51 and over

E. What is your sex?

☐ Female
☐ Male

F. Which of the following best describes your present level of college training in terms of degree(s) and quarter hours?

☐ BA + 15 hours
☐ BA + 30 hours
☐ MA
☐ MA + 15 hours
☐ MA + 30 hours
☐ MA + 45 hours
☐ EdD or PhD

1. You are undoubtedly aware of the Career Education Project in the Great Falls School District. What do you perceive as the major purposes for the project?

(a) ____

____

(b) ____

____

(c) ____

____

2. Which of the following career education concepts do you feel are: (1) important, and (2) manifest in your present curriculum? (A concept may be important but not observed in your school.) Check all appropriate spaces.

Concepts	Important			Manifest in Curric.		Comments
	Yes	No		Yes	No	
(a) Understand oneself						
(b) Relationship with others						
(c) Career Orientation						
(d) Career Information						
(e) Economic Awareness						
(f) Consumer Competency						
(g) Career skill exploration						

Concepts	Important			Manifest in Curric.		Comments
	Yes	No		Yes	No	
(h) Career decision-making						
(i) Career planning						
(j) Occupational skill development						
(k) Application of occupational skills						
(l) Placement, stability and advancement in a career of choice.						

3. Of those concepts which you indicated were important, which do you feel are being adequately addressed by the Career Education Project? (Check all appropriate spaces.)

(a) ☐ (b) ☐ (c) ☐ (d) ☐ (e) ☐ (f) ☐ (g) ☐ (h) ☐ (i) ☐ (j) ☐ (k) ☐ (l) ☐

4. Of those concepts which you indicated were presently manifest in your curriculum, which were installed largely as the result of the Career Education Project's efforts? (Check all appropriate spaces.)

(a) ☐ (b) ☐ (c) ☐ (d) ☐ (e) ☐ (f) ☐ (g) ☐ (h) ☐ (i) ☐ (j) ☐ (k) ☐ (l) ☐

5. Have you participated in any training programs sponsored by the Career Education Project during this past year?

☐ Yes

☐ No

→ If yes, which one(s)?

(a) ____________________

(b) ____________________

(c) ____________________

(d) ____________________

(e) ____________________

How would you rate the effectiveness and usefulness of each program you listed on the previous page?

Program	Effectiveness			Usefulness		
	Very	Ave	Not	Very	Ave	Not
(a)						
(b)						
(c)						
(d)						
(e)						

6. What do you perceive as your role in the development and implementation of Career Education in your school, relative to each of the following:

(a) increased student awareness of career options: ________

____

____

(b) reduction in school drop-outs: ________________

____

____

(c) increased vocational guidance services: ____________

____

____

(d) student opportunity to make career choices: ________

____

____

(e) increased relevance of the curriculum: ____________

____

____

(f) involvement of school staff in career education: __________

____

____

7. What procedures do you typically employ to effect involvement of parents and other concerned publics in school programs?

____

____

____

8. What do you feel are the most significant obstacles to the design, installation and operation of an effective career education curriculum, i.e., staff, money, space, etc.?

(a) Design: ______________________________________

____

(b) Installation: _________________________________

____

(c) Operation (evaluation, management, etc.): __________

____

9. The expected outcomes for the Career Education Project, as included in the original proposal, are listed below. Recognizing that the project is in the first of three years, would you please give us your opinion of how well the project is progressing toward attainment of these outcomes?

		General or Overall Rating Of Progress		
	Expected Outcomes	Very High	Average	Very Low
(a)	Increase student awareness of the broad range of career options	☐	☐	☐
(b)	Reduction in school drop-outs	☐	☐	☐
(c)	Increased vocational guidance services	☐	☐	☐

Expected Outcomes	General or Overall Rating Of Progress Very High	 Average	 Very Low
(d) More realistic career choices by students	☐	☐	☐
(e) Increased relevance in the school curriculum	☐	☐	☐
(f) Increased educational and job placement	☐	☐	☐
(g) Involvement of teachers and admininstration in career education	☐	☐	☐

10. The project staff have employed the activities listed below to foster attainment of the desired outcomes for the project. Rate the effectiveness of each activity by checking the appropriate space for only those activities which you have observed.

	Degree of Effectiveness					
	Not Observed	Very Low	Low	Average	High	Very High
(a) Career Education Course, Winter 1974 (Ed 571)						
(b) Administration of the Career Awareness Inventory, 1974						
(c) Interaction with the "Next Step" project						
(d) Staff visitations to other schools						
(e) Teacher committees to develop recommendations for use of community resource people and field trips						
(f) Production of audio-visual materials by teachers						
(g) "Career Days" activities						

11. Generally, how would you rate management of the project?

	Very Low	Low	Average	High	Very High
Effectiveness	☐	☐	☐	☐	☐
Efficiency	☐	☐	☐	☐	☐

List specific incidents, examples, problems, and/or decisions which contribute to your rating of project management.

____

____

12. Generally, how do you rate the total project?

	Very Low	Low	Average	High	Very High
Useful	☐	☐	☐	☐	☐
Important	☐	☐	☐	☐	☐
Significant	☐	☐	☐	☐	☐
Effective	☐	☐	☐	☐	☐
Feasible	☐	☐	☐	☐	☐

13. List one incident and/or example which illustrates your rating on each of the dimensions listed above.

Useful____

Important______________________________________

Significant____________________________________

Effective______________________________________

Feasible_______________________________________

14. Approximately how many innovations have been "installed" in your school during the past two years and are currently operational?

☐ None
☐ 1 - 3
☐ 4 - 6
☐ 7 or more

Please name the three most significant, in terms of their effect upon the school.

(a) ____

(b) ____

(c) ____

15. Are costs a significant factor in deciding to install an innovation?

☐ Yes

☐ No

→ If yes, what types of expenditures do you classify as installation costs?

(a) ____________________ (c) ____________________

(b) ____________________ (d) ____________________

16. Please describe the model you would employ to install both a complex innovation, such as differentiated staffing, and a simple innovation, such as a new media service.

(a) Complex: ____

(b) Simple: ____

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana 59403
1974

Evaluation Questionnaire

Administration
Form II

Listed below are several concepts which may be considered components of a Career Education Curriculum. For each concept, would you please answer four questions by checking the appropriate space(s):

1. Should the concept be included in a career education curriculum?

2. How important is the concept?

3. To what extent can the concept presently be observed in the curriculum?

4. To what extent, or degree, should you be responsible for assisting students to attain this concept?

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students be familiar with the values of a work-oriented society.												
Students accept the values of a work-oriented society.												

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Students understand work as effort which produces benefit to self and others.												
Each student understands and accepts himself.												
Through understanding and acceptance of self, the student is able to live effectively in society.												
Each individual is able to resolve his concerns.												
Each student possesses information about his innate and acquired abilities, capabilities, preferences, and potentials.												
Each student possesses knowledge about specific occupations.												
Students who so desire may become prepared for employment in a specialized job area.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Each student develops an "acceptable" job attitude.												
Each student is familiar with occupational classifications.												
Each student is aware of relevant factors to be considered in career decision making.												
Students are capable of effective occupational planning.												
Students manifest career awareness as demonstrated by their knowled about available career options.												
Students are able to utilize career information in cluster exploration experiences.												
Students are able to use knowledge about career concepts in the process of making career decisions.												
Students are capable of independent learning.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students are able to relate studies within the general curriculum to their career interests.												
Students are able to exercise responsible judgement in career planning and choice.												
Each student understands his family, avocational, citizen, and economic roles in life.												
Each student is capable of utilizing information gained from work observation in learning about careers, expanding his knowledge about available career options, and in making career choices.												
Provide those experiences which will enable students to ultimately find meaningful, satisfying work.												
Design and provide those experiences which will enable each student to understand himself, accept himself, and live effectively in society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide those services which will enable students to acquire information about their innate and acquired abilities, capabilities, preferences, and potentials.												
Establish those services and experiences which will enable each student to acquire information about the world of work.												
Design and provide those experiences which enable students who so desire to prepare for a specialized job area.												
Facilitate student's understanding the importance of re-training or up-grading of occupational skills.												
Insure that each student is able to acquire desired occupational skills.												
Provide cooperative work experiences for those students who elect to participate in such experiences.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide opportunities for students to explore "key" occupational areas.												
Establish a career education continuum, progressing from career awareness through exploration of occupations to development of occupational skills.												
Establish and operate career information centers for student use.												
Provide in-service training for professional staff in the area of career education.												
Provide a program of work experience as a student option.												
Provide a program of work observation as a student option.												

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Parents
Form I

The following questions have been designed to provide us with descriptive information. If you are married, please provide the requested information about yourself and your spouse.

1. Present occupation

   Yourself: ______________________

   Your spouse: ____________________

   ☐ Not married

   - ☐ Divorced
   - ☐ Separated
   - ☐ Widow/Widower

2. Years in your present occupation

   Yourself: ______________________

   Your spouse: ____________________

3. Present age:

Yourself →	☐	26 - 30	☐	← Your spouse
	☐	31 - 35	☐	
	☐	36 - 40	☐	
	☐	41 - 45	☐	
	☐	46 - 50	☐	
	☐	51 - 55	☐	
	☐	56 - Over	☐	

4. Your present income:

Yourself →	☐	$3,000 - $5,000	☐	← Your spouse
	☐	$5,001 - $7,000	☐	
	☐	$7,001 - $9,000	☐	
	☐	$9,001 - $11,000	☐	
	☐	$11,001 - $13,000	☐	
	☐	$13,001 - $15,000	☐	
	☐	$15,001 - Over	☐	

5. Your sex:

Yourself ☐ M ☐ F

Your spouse ☐ M ☐ F

6. Number of children in school (total: ____________)

Grade K	☐	Number of boy(s): ______	Number of girl(s): ______
Grade 1	☐	boy(s): ______	girl(s): ______
Grade 2	☐	boy(s): ______	girl(s): ______
Grade 3	☐	boy(s): ______	girl(s): ______
Grade 4	☐	boy(s): ______	girl(s): ______
Grade 5	☐	boy(s): ______	girl(s): ______
Grade 6	☐	boy(s): ______	girl(s): ______
Grade 7	☐	boy(s): ______	girl(s): ______
Grade 8	☐	boy(s): ______	girl(s): ______
Grade 9	☐	boy(s): ______	girl(s): ______
Grade 10	☐	boy(s): ______	girl(s): ______
Grade 11	☐	boy(s): ______	girl(s): ______
Grade 12	☐	boy(s): ______	girl(s): ______

7. Level of education completed (circle highest)

Yourself:	1	2	3	4	5	6	7	8	9	10	11	12	AA	BA	MA/MS	PhD
Your spouse:	1	2	3	4	5	6	7	8	9	10	11	12	AA	BA	MA/MS	PhD

8. The concept of Career Education embodies a number of different meanings. Would you please describe for us what Career Education means to you?

____

____

____

9. In your opinion, what major benefits would students derive from a Career Education program?

(a) elementary students: ____________________

(b) jr. high school students: ____________________

(c) sr. high school students: ____________________

10. If your children were participating in a Career Education program, what skills, knowledge and attitudes would you want them to acquire?

(a) skills: ____________________

(b) knowledge: ____________________

(c) attitudes: ____________________

11. When you described skills, knowledge and attitudes above, did you have a particular grade level in mind when each would be acquired?

☐ Yes

☐ No

→ If yes, what grade level:

(a) skill __________

(b) knowledge ______

(c) attitude _______

12. In your opinion, what is the difference between a Career Education program and a "standard" school program?

____

____

____

13. What role, or part, do you feel the community should have in a Career Education curriculum? (Check all appropriate spaces.)

☐ Provide resource speakers

☐ Provide employment

☐ Provide work observation stations

☐ Set goals for the program

☐ Other (specify:____)

14. What do you feel should be your role in a Career Education curriculum?

☐ Service as a resource person

☐ Insure that own child understands family occupations

☐ Develop understanding of need for shared family responsibility.

☐ Assist students in understanding wide variety of career choices

☐ Work closely with schools in developing career programs

☐ Other (specify:____)

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Labor Representatives
Form I

1. Are you aware of the Career Education Project currently operational in the Great Falls schools?

   ☐ Yes

   ☐ No

   → If no, would you like to have descriptive information about the project?

   ☐ Yes

   ☐ No

   → If yes, what do you perceive as the major purposes of the project?

   (a) ______________________________

   (b) ______________________________

   (c) ______________________________

2. Various aspects of project operations will place students in a variety of work-type situations, i.e., work observation, short term work experiences, etc. Do you perceive any problems with students engaging in such experiences from your point of view?

   ☐ Yes

   ☐ No

   → If yes, what problems will be existant?

   (a) ______________________________

   (b) ______________________________

(c) ____

(d) ____

Do any of the problems you listed have legal basis, i.e., will students working on a short-term basis violate any state or federal laws?

☐ Yes

☐ No

→ If yes, which laws?

(a) ____

(b) ____

(c) ____

(d) ____

3. Are you aware of any union policies or rules which may have an effect upon student work experience and about which the project should be cognizant?

☐ Yes

☐ No

→ If yes, would you please list or describe them?

(a) ____

(b) ____

(c) ____

(d) ____

4. Do you feel that a focus upon career education can be beneficial to students?

☐ Yes

☐ No

→ If no, why not? ____

____

____

If yes, in what ways?______________________________

5. What do you believe would be the most effective strategy for the project to keep you informed about their activities?

6. In what ways do you feel the project and unions should interact, i.e., adopt a mutually supportive posture?

7. In what ways do you feel unions could best support the following activities of the project?

(a) Cooperative work-experience:____________________

☐ I don't know what this means.

(b) Work-observation program:____________________

☐ I don't know what this means.

(c) Teacher-training:____________________

☐ I don't know what this means.

(d) Providing resource speakers:____________________

☐ I don't know what this means.

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Employers
Form I

Type of business: ____________________

Number of permanent, full-time employees: ____________________

Years in present business: ____________________

1. In what ways are you currently working with the Great Falls public schools? (Check all appropriate spaces.)

   ☐ Student employees

   ☐ Student observers

   ☐ Speak/make presentations to classes

   ☐ Other (please specify: ____________________)

2. Why did you agree to accept students (of any class) at your place of business?

   ☐ Needed part-time help

   ☐ Student possessed necessary skills

   ☐ Concern for students

   ☐ Concern about the labor supply for your business

   ☐ Concern for the community

   ☐ Other (please specify: ____________________)

3. Listed below are the objectives of the Career Education Project in the Great Falls School District. Would you please rate each objective on the following criteria:

(a) Should it be included in a Career Education program?

(b) How important is the objective?

(c) To what extent is it presently being attained?

(d) Would you be willing to participate in activities oriented toward its attainment?

Project Objectives	(a)		(b)			(c)			(d)	
	Should be included		IMPORTANCE H = Very L = Low			PRESENT ATTAINMENT H = Adequate L = Less than adequate			Willing to Participate?	
	Yes	No	H	A	L	H	A	L	Yes	No
Facilitate students' finding satisfaction in employment upon leaving school										
Students are able to make decisions regarding further education or training.										
Students acquire useful levels of self-awareness of innate and acquired abilities, preferences and potentials.										
Students possess requisite skills to make quality decisions about careers.										

Project Objectives	(a)		(b)			(c)			(d)	
	Should be included		IMPORTANCE H = Very L = Low			PRESENT ATTAINMENT H = Adequate L = Less than adequate			Willing to Participate?	
	Yes	No	H	A	L	H	A	L	Yes	No
Students be familiar with the values of a work-oriented society.										
Students accept the values of a work-oriented society.										
Students find work meaningful and satisfying.										
Each student understands and accepts himself.										
Students who so desire may become prepared for employment in a specialized job area.										
Each student is able to understand and form meaningful employer-employee relationships.										
Each student develops an "acceptable" job attitude.										
Students are capable of effective occupational planning.										
Each student is aware of relevant factors to be considered in career decision making.										
Students manifest career awareness as demonstrated by their knowledge about available career options.										

Project Objectives	(a)		(b)			(c)			(d)	
	Should be included		IMPORTANCE H = Very L = Low			PRESENT ATTAINMENT H = Adequate L = Less than adequate			Willing to Participate?	
	Yes	No	H	A	L	H	A	L	Yes	No
Students are capable of independent learning.										
Students are able to exercise responsible judgment in career planning and choice.										
Students have available to them necessary resources to develop marketable vocation skills.										
Each student develops effective work habits.										
Each student has an understanding of adjustment to societal changes.										
Students demonstrate an acceptable attitude toward the "World of Work."										
Services are provided which enable students to ultimately find meaningful, satisfying work.										
Ensure that each student is able to acquire desired occupational skills.										
Provide cooperative work experiences for students to explore "key" occupational areas.										

	(a)		(b)			(c)			(d)	
Project Objectives	Should be included		IMPORTANCE H = Very L = Low			PRESENT ATTAINMENT H = Adequate L = Less than adequate			Willing to Participate?	
	Yes	No	H	A	L	H	A	L	Yes	No
Establish and operate career information centers for student use.										
Provide a program of work experience as a student option.										
Provide a program of work observation as a student option.										
Coordinate employment of students within the business community.										
Establish and operate a student employment center.										
Use resources from within the community to develop student understandings of the "World of Work."										
Provide the type of placement service which enables students to satisfy economic needs.										
Establish a career education continuum which progresses from career awareness through exploration of occupations to development of occupational skills.										

4. What do you believe should be the major goals and/or purposes for a career education project?

(a) ______________________________

____

(b)
(b) ______________________________

____

(c) ______________________________

____

5. As an employer, what do you perceive as the major contribution you can make toward attainment of the goals you listed?

(a) ______________________________

____

(b) ______________________________

____

(c) ______________________________

____

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana 59403
1974

Evaluation Questionnaire

Employers
Form II

Listed below are several concepts which may be considered components of a Career Education Curriculum. For each concept, would you please answer four questions by checking the appropriate space(s):

1. Should the concept be included in a career education curriculum?
2. How important is the concept?
3. To what extent can the concept presently be observed in the curriculum?
4. To what extent, or degree, should you be responsible for assisting students to attain this concept?

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students be familiar with the values of a work-oriented society.												
Students accept the values of a work-oriented society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students find work both meaningful and satisfying.												
Students understand work as effort which produces benefit to self and others.												
Each student understands and accepts himself.												
Through understanding and acceptance of self, the student is able to live effectively in society.												
Each individual is able to resolve his concerns.												
Each student possesses information about his innate and acquired abilities, capabilities, preferences, and potentials.												
Each student possesses knowledge about specific occupations.												
Students who so desire may become prepared for employment in a specialized job area.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more Info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Each student develops an "acceptable" job attitude.												
Each student is familiar with occupational classifications.												
Each student is aware of relevant factors to be considered in career decision making.												
Students are capable of effective occupational planning.												
Students manifest career awareness as demonstrated by their knowled about available career options.												
Students are able to utilize career information in cluster exploration experiences.												
Students are able to use knowledge about career concepts in the process of making career decisions.												
Students are capable of independent learning.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students are able to relate studies within the general curriculum to their career interests.												
Students are able to exercise responsible judgement in career planning and choice.												
Each student understands his family, avocational, citizen, and economic roles in life.												
Each student is capable of utilizing information gained from work observation in learning about careers, expanding his knowledge about available career options, and in making career choices.												
Provide those experiences which will enable students to ultimately find meaningful, satisfying work.												
Design and provide those experiences which will enable each student to understand himself, accept himself, and live effectively in society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide those services which will enable students to acquire information about their innate and acquired abilities, capabilities, preferences, and potentials.												
Establish those services and experiences which will enable each student to acquire information about the world of work.												
Design and provide those experiences which enable students who so desire to prepare for a specialized job area.												
Facilitate student's understanding the importance of re-training or up-grading of occupational skills.												
Insure that each student is able to acquire desired occupational skills.												
Provide cooperative work experiences for those students who elect to participate in such experiences.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide opportunities for students to explore "key" occupational areas.												
Establish a career education continuum, progressing from career awareness through exploration of occupations to development of occupational skills.												
Establish and operate career information centers for student use.												
Provide in-service training for professional staff in the area of career education.												
Provide a program of work experience as a student option.												
Provide a program of work observation as a student option.												

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Employers
Form III

Type of business: ____________________

Number of permanent, full-time employees: ____________________

Years in present business: ____________________

1. Did you contact the school coordinator when attempting to employ a cooperative work experience student?

☐ Yes

☐ No If no, why not? ____________________

☐ I have no such students in my employ.

→ If yes, why did you contact the school coordinator? ____________________

____

2. What do you consider to be the most important skills an employee should possess?

(a) ____________________

(b) ____________________

(c) ____________________

3. Have you found part-time high school students to be productive employees?

☐ Yes

☐ No

→ If no, what appear to be their major deficiencies?________

____

→ If yes, what do you find to be their major attributes?____

____

4. When do you have the greatest need for part-time employees, such as high school students?

☐ 8:00 am - 12:00 n

☐ 12:00 n - 3:00 pm

☐ 3:00 pm - 6:00 pm

☐ 6:00 pm - 9:00 pm

☐ 9:00 pm - Later

5. As an employer, what are your greatest needs relative to each of the following?

(a) locating part-time employees:______________________________

____

(b) training part-time employees:______________________________

____

(c) quality of work of part-time employees:____________________

____

(d) other (please specify:____________________________________)

____

6. What types of school services would best satisfy the "needs" you identified above?

(a) locating part-time employees:______________________________

____

(b) training part-time employees: ______________________________

____

(c) quality of work of part-time employees: ____________________

____

(d) other (please specify: ______________________________________)

____

7. How many full- and part-time employees do you presently have?

(a) full-time: __________

(b) part-time: __________ Number of part-time who are high school students: __________

8. How many of the positions in your business require:

(a) college degree: ______________________________

(b) technical training: ______________________________

(c) high school diploma: ______________________________

(d) less than high school diploma: ______________________________

9. What procedure do you typically follow in locating and employing part-time employees?

☐ Contact the schools (who? ______________________________)
☐ Employee contacts
☐ Student contacts
☐ State employment service
☐ Other (please describe: ______________________________

____)

10. If the schools had a placement/employment service, would you use it?

☐ Yes
☐ No
→ If no, why not? ______________________________

____

→ If yes, how could it BEST serve your needs? ____________________

____

____

11. Do you feel that the schools should conduct an employee follow-up program as a part of placement/employment procedures?

☐ Yes

☐ No

→ If yes, which of the following do you feel should be included in such follow-up studies?

☐ Relevance of school curriculum

☐ Meaningfulness of school curriculum

☐ Documentation of employee problems

☐ Number of different positions within a given time

☐ Continued placement/employment service

☐ Other (please specify:________________________)

Comments:____________________________________

____

____

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Work Coordinator
Form I

1. In which of the following areas do you teach and supervise cooperative work students?

☐ Distributive Education (D. E.)

☐ Office Education (O. E.)

☐ Other (please specify:______________________________)

2. How many students do you supervise in the cooperative work experience program?

☐ 10 - 15

☐ 16 - 20

☐ 21 - 25

☐ 26 - 30

☐ 31 - 35

☐ 36 - 40

☐ 41 - Over

3. What percentage of your students enrolled in the cooperative work experience program are also involved in club related activities?

☐ None

☐ 10 - 30%

☐ 31 - 50%

☐ 51 - 70%

☐ 71 - 90%

☐ 91 - 100%

4. Do you have a formal training plan you follow in coordinating student work experiences?

☐ Yes

☐ No

→ If no, what alternative do you employ?________________________

____

If yes, what criteria did you employ in the design and subsequent use of the plan?________________________

____

____

5. What percentage of the students enrolled in your cooperative work program are, or have, held jobs congruent with their professed career choice?

☐ None

☐ 10 - 20

☐ 21 - 30

☐ 31 - 40

☐ 41 - 50

☐ 51 - Over

6. What criteria do you employ to select students for the cooperative work program? (Check all appropriate spaces.)

☐ Have completed pre-requisite courses. (Name pre-requisites:

____)

☐ Attendance (all-school)

☐ Attitude

☐ Grades

☐ Economic need

☐ Career objectives

☐ Employability

☐ Student educational plans

☐ Teacher recommendations

☐ Other (specify:____________)

7. Who has final responsibility for selection of students?

☐ Teacher-coordinator

☐ Administration (school)

☐ Counselor

☐ Employer

☐ Other (specify:____)

8. Approximately what percentage of your time is spent in each of the following?

_____% Coordination of cooperative students' experiences

_____% Clerical duties

_____% Club activities

_____% Coordinations within the business community

_____% Preparation for classes

_____% Public relations

_____% Teacher consultation

_____% In-service training

_____% Student counseling

_____% Scheduled classes

9. What procedure(s) do you employ to recruit new training sites for the cooperative work program?

____

____

____

10. Approximately how many training sites do you currently inventory, i.e., how many are available for student placement?

__________ Comments:_______________________________________
(Number)

____

219

11. What procedure do you employ to maintain training sites (stations) in your inventory?

____

____

____

12. What do you perceive as the most significant constraint to efficient and effective operation of the cooperative work program?

____

____

____

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana 59403
1974

Evaluation Questionnaire

Work Coordinators
Form II

Listed below are several concepts which may be considered components of a Career Education Curriculum. For each concept, would you please answer four questions by checking the appropriate space(s):

1. Should the concept be included in a career education curriculum?
2. How important is the concept?
3. To what extent can the concept presently be observed in the curriculum?
4. To what extent, or degree, should you be responsible for assisting students to attain this concept?

	1		2			3			4			
	Part of a Career Education Curriculum?		How IMPORTANT is this concept?			To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students be familiar with the values of a work-oriented society.												
Students accept the values of a work-oriented society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students find work both meaningful and satisfying.												
Students understand work as effort which produces benefit to self and others.												
Each student understands and accepts himself.												
Through understanding and acceptance of self, the student is able to live effectively in society.												
Each individual is able to resolve his concerns.												
Each student possesses information about his innate and acquired abilities, capabilities, preferences, and potentials.												
Each student possesses knowledge about specific occupations.												
Students who so desire may become prepared for employment in a specialized job area.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Each student develops an "acceptable" job attitude.												
Each student is familiar with occupational classifications.												
Each student is aware of relevant factors to be considered in career decision making.												
Students are capable of effective occupational planning.												
Students manifest career awareness as demonstrated by their knowled about available career options.												
Students are able to utilize career information in cluster exploration experiences.												
Students are able to use knowledge about career concepts in the process of making career decisions.												
Students are capable of independent learning.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students are able to relate studies within the general curriculum to their career interests.												
Students are able to exercise responsible judgement in career planning and choice.												
Each student understands his family, avocational, citizen, and economic roles in life.												
Each student is capable of utilizing information gained from work observation in learning about careers, expanding his knowledge about available career options, and in making career choices.												
Provide those experiences which will enable students to ultimately find meaningful, satisfying work.												
Design and provide those experiences which will enable each student to understand himself, accept himself, and live effectively in society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide those services which will enable students to acquire information about their innate and acquired abilities, capabilities, preferences, and potentials.												
Establish those services and experiences which will enable each student to acquire information about the world of work.												
Design and provide those experiences which enable students who so desire to prepare for a specialized job area.												
Facilitate student's understanding the importance of re-training or up-grading of occupational skills.												
Insure that each student is able to acquire desired occupational skills.												
Provide cooperative work experiences for those students who elect to participate in such experiences.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide opportunities for students to explore "key" occupational areas.												
Establish a career education continuum, progressing from career awareness through exploration of occupations to development of occupational skills.												
Establish and operate career information centers for student use.												
Provide in-service training for professional staff in the area of career education.												
Provide a program of work experience as a student option.												
Provide a program of work observation as a student option.												

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Student
Form I

The purpose of this instrument is to describe how you feel about the various factors listed. These factors describe student personal needs, school services, organizational procedures and student personal goals.

Please mark an X in the box to the right of each statement which describes how important the factor described is to you personally.

Complete all of the items; don't leave any blank. Thank you for your assistance in this important effort.

	Degree of Personal Importance				
FACTORS	Very High	Fairly High	Moderate	Fairly Weak	Not At All
1. To select more courses by myself.					
2. To get some "on-the-job" experiences.					
3. To understand, accept, and like myself better.					
4. To associate with a group of kids.					
5. To know how to apply for a job.					
6. To finish school work & tests in the alloted time.					
7. To know more about my academic weaknesses.					
8. To know how my interests relate to work.					
9. To know what I believe about God & religion.					
10. To know how to solve problems with my parents.					
11. To know how to interview for a job.					
12. To know more about graduation requirements.					
13. To have my parents know about my occupational goals.					

Degree of Personal Importance

FACTORS	Very High	Fairly High	Moderate	Fairly Weak	Not At All
14. To learn how to make decisions.					
15. To know how to act in a mixed group.					
16. To know how I can finance more schooling.					
17. To learn how to study better.					
18. To find courses relevant to my future.					
19. To get help in finding a summer job.					
20. To set my goals in life.					
21. To know how to get a desirable date.					
22. To get more information on trade schools.					
23. To participate in extra-curricular activities.					
24. To talk to a counselor about vocational planning.					
25. To develop confidence in myself.					
26. To be a better listener & respond better to others.					
27. To get more information on colleges.					
28. To have teachers who understand students.					
29. To have the school meet my needs as a student.					
30. To have access to information about occupations.					
31. To understand more about sex and love.					
32. To develop friendships with persons of both sexes.					
33. To match requirements of a career with my interests.					
34. To have my standarized test scores interpreted to me.					

	Degree of Personal Importance				
FACTORS	Very High	Fairly High	Moderate	Fairly Weak	Not At All
35. To know how my aptitudes relate to work					
36. To talk about personal concerns with a counselor.					
37. To be able to independently state my own views.					
38. To get help in finding a job after graduation.					
39. To be interested in my courses.					
40. To know what jobs are available to me.					
41. To have someone listen to me when I have a problem.					
42. To be more tolerant of views with which I differ.					
43. To have classes on career planning.					
44. To have classroom test scores that accurately reflect my knowledge about a content/course area.					
45. To have a counselor explain what I can realistically achieve.					
46. To get help in finding part-time work.					
47. To learn how to tell others how I feel.					
48. To not dislike my teachers.					
49. To get information about job opportunities.					
50. To have a counselor help me select courses.					
51. To know more about specific jobs.					
52. To know my legal rights & moral obligations.					
53. To better understand adults.					
54. To know what volunteer work is available.					

	Degree of Personal Importance				
FACTORS	Very High	Fairly High	Moderate	Fairly Weak	Not At All
55. To have good study conditions at home.					
56. To find courses which are not too difficult.					
57. To know more about the world of work.					
58. To understand more about the use and abuse of alcohol.					
59. To more easily accept others.					
60. To have teachers relate subject matter to occupations.					
61. To develop better relationships with my teachers.					
62. To know how my abilities relate to work.					
63. To understand how my feelings affect my behavior.					
64. To build bonds of trust with people.					
65. To know what prior training is needed for a particular profession.					
66. To have access to a counselor at the right time.					

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana

1974

Evaluation Questionnaire

Students
Form II-A

1. What is your present year (grade) in school?

☐7 ☐8 ☐9 (Freshmen)

☐10 (Sophomore) ☐11 (Junior) ☐12 (Senior)

2. What is your present age?

________years

3. What is your sex?

☐Female
☐Male

4. What is your parent's present occupation?

Father: ______________________________ Deceased☐
Mother: ______________________________ Deceased☐

5. How many years have you lived in Great Falls?

☐less than 5 ☐8 - 10

☐5 - 7 ☐11 or more

6. During this past year, how many formal (scheduled) meetings have you had with a school counselor which were **NOT** for scheduling purposes?

☐none ☐4 - 6
☐1-3 ☐7 - 9
☐10 or more

If you checked any of these boxes, please check below to indicate the general purposes of your meetings. (May check more than one)

☐disciplinary reasons ☐grade problems
☐family problems ☐vocational planning
☐educational planning ☐problems with teachers
☐personal problems ☐________________________

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7. What does the term "Career Education" mean to you? ____________________

____

____

8. Have you experienced what you would consider "Career Education" in any of your courses this year?

☐ Yes

☐ No

► If Yes, which ones? Describe the activity you considered to be "Career Education".

	Course	**Describe what happened**
(a)	____________	______________________
(b)	____________	______________________
(c)	____________	______________________
(d)	____________	______________________

9. A major concern throughout education is an attempt to ensure that school programs meet students needs (are relevant).

(a) Of the courses in which you are presently enrolled, which do you feel best meets your needs? ____________________

____

____

(b) What makes the course relevant? ____________________

____

10. Which of your present courses do you feel best prepares you for the career you want to pursue?

Name of Course: ____________________

11. What is there about the course you named in (10) that causes you to feel it is preparing you for your career choice? ____________________

____

____

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana

1974

Evaluation Questionnaire

Student
Form II B

1. What does the term "Career Education" mean to you?

2. Have you experienced what you would consider "Career Education" in any of your courses this year?

   ☐ Yes

   ☐ No

   If Yes, which ones? Describe the activity you considered to be in Career Education?

	Course	Describe what happened:
(a)		
(b)		
(c)		
(d)		

3. Please check if you feel the following career education goals are present in the curriculum and, if so, indicate areas where changes are needed to better meet those goals.

GOAL	Present in Curriculum	Not Present in Curriculum	If present in the curriculum, please check below which areas need to be changed to assist you in reaching the goal.			
			Course Offerings	Work Experience	Counseling Services	Teaching Methods
Understand myself						
Establish better relationships with others						
Acquire career information						
Develop a better understanding of our economic system						
Increase my competence as a purchaser of goods and services						
Know about skills required for a variety of careers						
Become better able to make good decisions						
Develop skills in planning for a career						
Develop occupational skills in a career of my choosing						
Apply occupational skill in a work experience						
Assistance in finding a job						

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana

1974

Evaluation Questionnaire

Student
Form III

1. What is your present age? ________ (years) 2. What is your sex? ☐ Female ☐ Male

3. What is your parent's occupation?

Father: ______________________________________ Deceased ☐

Mother: ______________________________________ Deceased ☐

4. How many years have you lived in Great Falls?

☐ less than 2 years
☐ 2 to 4 years
☐ 5 - 7 years
☐ 8 to 10 years
☐ 11 or more years

5. During this past year, how many formal (scheduled) meetings have you had with a school counselor which were **NOT** for scheduling purposes?

☐ None
☐ 1 - 3
☐ 4 - 6
☐ 7 - 9
☐ 10 or more

If you checked any of these boxes, please check below to indicate the general purposes of your meetings. (May check more than one)

☐ disciplinary reasons
☐ family problems
☐ educational planning
☐ personal problems
☐ grade problems
☐ vocational planning
☐ problems with teachers
☐ other

6. Which of the following people were most instrumental in your selection of this cooperative program?

☐ teacher(s)
☐ coordinator
☐ counselor
☐ former student of this program
☐ sister or brother
☐ friend(s)
☐ other

7. What work station assignments have you had during this past year, i.e. where did you work and in what kind of job?

	Place	Type of Job
(a)		
(b)		
(c)		

8. Did you have a specific reason for seeking a particular kind of work?

☐ Yes
☐ No
If Yes, why? ____________________

9. How many times per month did your supervising teacher observe and/or contact you on-the-job?

☐ None
☐ 1 - 2
☐ 4 or more
☐ less than once a month
☐ 3 - 4

10. How would you rate the relationship of your work station job to your career goals?

	Very High	Somewhat	None
Degree of relationship or relationship between work and career goals	☐	☐	☐

11. How would you rate the relationship of your work station job to this course?

	Very High	Somewhat	None
Degree of relationship between work and school courses	☐	☐	☐

12. Do you belong to any type of career or professional organization such as DECA, OEA, VICA, or a labor union?

☐ Yes
☐ No
If Yes, please name them: ____________________

13. Can you provide us with any additional information about procedures employed in the work experience program which will make it a better program? (opinions & feelings are sought in this question)

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Advisory Board
Form I

Name: ______________________ Date: __________

Title: ______________________________

Address: ______________________________

1. How long have you served on the Advisory Council for the Great Falls Career Education Project?

   ______months

2. How were you selected for membership?

   ☐ Appointed (by whom: ______________________)

   ☐ Request (yours/someone else's: ______________________)

3. Do you know why you are a member of this Advisory Council?

   ☐ Yes ☐ No

   If yes, please explain what you feel are your special qualifications:

   ____

   ____

4. How many meetings of the Advisory Council have you attended?

   ______(number)

5. Generally, how have you been notified that a meeting is to be held?

____

____

6. Are you satisfied with the procedure employed to notify you of meetings?

☐ Yes ☐ No

→ If no, what changes in the procedure could you recommend?

____

____

7. Generally, how would you rate the following?

	High	Average	Low
(a) USEFULNESS of the Advisory Council	☐	☐	☐
(b) EFFECTIVENESS of the Advisory Council	☐	☐	☐
(c) IMPORTANCE of the Advisory Council	☐	☐	☐
(d) EFFICIENCY of the Advisory Council	☐	☐	☐

(a) Comments: ____

____

(b) Comments: ____

____

(c) Comments: ____

____

(d) Comments: ____

____

8. What do you perceive as your role on the Advisory Council?

(a) Provide information ☐ Yes ☐ No

Please explain: ____________________

____

(b) Make decisions: ☐ Yes ☐ No

Please explain: ____________________

____

(c) Serve as a consultant ☐ Yes ☐ No

Please explain: ____________________

____

(d) Other (specify): ____________________

____

9. Are you satisfied with your present role?

☐ Yes

☐ No

If not, what do you believe your role should be? __________

____

What additional contribution can you make to the project?

____

____

10. In your opinion, what effects have the Advisory Board had upon the project?

(a) ____________________

(b) ____________________

(c) ____________________

(d) ____________________

11. What would you predict as FUTURE Career Education needs in Great Falls?

(a) Staff: ____________________

____

(b) Programs: ____________________

____

(c) Facilities: ____________________

____

(d) Community: ____________________

____

(e) Other (specify): ____________________

____

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana 59403
1974

Evaluation Questionnaire

Advisory Board
Form II

Listed below are several concepts which may be considered components of a Career Education Curriculum. For each concept, would you please answer four questions by checking the appropriate space(s):

1. Should the concept be included in a career education curriculum?
2. How important is the concept?
3. To what extent can the concept presently be observed in the curriculum?
4. To what extent, or degree, should you be responsible for assisting students to attain this concept?

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students be familiar with the values of a work-oriented society.												
Students accept the values of a work-oriented society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students find work both meaningful and satisfying.												
Students understand work as effort which produces benefit to self and others.												
Each student understands and accepts himself.												
Through understanding and acceptance of self, the student is able to live effectively in society.												
Each individual is able to resolve his concerns.												
Each student possesses information about his innate and acquired abilities, capabilities, preferences, and potentials.												
Each student possesses knowledge about specific occupations.												
Students who so desire may become prepared for employment in a specialized job area.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Each student develops an "acceptable" job attitude.												
Each student is familiar with occupational classifications.												
Each student is aware of relevant factors to be considered in career decision making.												
Students are capable of effective occupational planning.												
Students manifest career awareness as demonstrated by their knowled about available career options.												
Students are able to utilize career information in cluster exploration experiences.												
Students are able to use knowledge about career concepts in the process of making career decisions.												
Students are capable of independent learning.												

	1		2			3			4			
	Part of a Career Education Curriculum?		How IMPORTANT is this concept?			To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Students are able to relate studies within the general curriculum to their career interests.												
Students are able to exercise responsible judgement in career planning and choice.												
Each student understand his family, avocational, citizen, and economic roles in life.												
Each student is capable of utilizing information gained from work observation in learning about careers, expanding his knowledge about available career options, and in making career choices.												
Provide those experiences which will enable students to ultimately find meaningful, satisfying work.												
Design and provide those experiences which will enable each student to understand himself, accept himself, and live effectively in society.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide those services which will enable students to acquire information about their innate and acquired abilities, capabilities, preferences, and potentials.												
Establish those services and experiences which will enable each student to acquire information about the world of work.												
Design and provide those experiences which enable students who so desire to prepare for a specialized job area.												
Facilitate student's understanding the importance of re-training or up-grading of occupational skills.												
Insure that each student is able to acquire desired occupational skills.												
Provide cooperative work experiences for those students who elect to participate in such experiences.												

	1 Part of a Career Education Curriculum?		2 How IMPORTANT is this concept?			3 To what extent can the concept PRESENTLY be OBSERVED in the curriculum?			4 How RESPONSIBLE should you be for the attainment of this concept?			Need more info about this concept.
Career Education Concepts	Yes	No	Very	Ave	Not	A Great Deal	Some	Not At All	Fully	Some	None	
Provide opportunities for students to explore "key" occupational areas.												
Establish a career education continuum, progressing from career awareness through exploration of occupations to development of occupational skills.												
Establish and operate career information centers for student use.												
Provide in-service training for professional staff in the area of career education.												
Provide a program of work experience as a student option.												
Provide a program of work observation as a student option.												

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Career Education Specialists
Form I

Name:______________________________ Date:__________

Present position:______________________________

1. Would you please describe what you perceive as an "ideal" career education curriculum, including the desired:

   (a) Goals:______________________________

   (b) Program (content and activities):____________________

   (c) Material resources:______________________________

   (d) Personnel resources (staff):____________________

2. The literature is replete with such terms as "career awareness," skill development, occupational awareness, etc. Some confusion exists in the field because of conflicting definitions for these terms. Would you please provide us with your definition for each of the following terms?

(a) Career awareness: ______________________________

____

(b) Self-awareness: ______________________________

____

(c) Career exploration: ______________________________

____

(d) Work experience: ______________________________

____

(e) Work observation: ______________________________

____

(f) Occupational preparation: ______________________________

____

(g) Career choice: ______________________________

____

(h) Satisfaction in a career choice: ______________________________

____

3. In what ways do you, in your work, operationally differentiate between career education and:

(a) vocational education? ______________________________

____

____

(b) general education? ______________________________

____

____

4. In what ways do you feel career education can foster curricular relevance?

____

____

____

____

5. What have you experienced as the most significant constraints to definition and integration of career education, relative to each of the following?

(a) teachers: ____

____

(b) administrators (bldg. level): ______________________

____

(c) administrators (district/regional level): __________

____

(d) curricular tradition: _____________________________

____

(e) conceptualization of career education: ____________

____

(f) community and/or other concerned publics: _________

____

(g) curricular organization/structure: ________________

____

6. Each of the major project goals are listed on the following page. Would you please rate them relative to their congruence with what you perceive as the most pressing national needs?

	Degree of Congruence		
	Low	Average	High
(a) To develop a program which facilitates satisfactory placement of students in either employment, education or training which permits the pursuit of a career choice or meets a real or perceived need.	☐	☐	☐
(b) To develop and implement procedures that enable students to explore and understand their unique characteristics and how these characteristics relate to defined life roles.	☐	☐	☐
(c) To facilitate integration of career education concepts into the curriculum such that each student may systematically develop those skills that enable him to function in defined life roles.	☐	☐	☐
(d) To develop procedures for planning, organizing, coordinating, directing and controlling staff, project, district and community resources to ensure the adoption of project goals.	☐	☐	☐

7. What general types of competencies, relative to career education, should be possessed by:

(a) teachers? ____

____

____

____

(b) consultants/specialists? _________________________________

____

____

____

8. What do you perceive as the greatest needs in career education:

(a) at the present time? ______________________________

____

____

(b) in the future (5 years)? ___________________________

____

____

9. Can you provide any additional information, relative to trends in career education instructional strategies, resources, research, need for leaders, and need for teachers that will assist project staff in structuring future project activities?

(a) Instructional strategies: __________________________

____

(b) Resources (staff): ______________________________

____

(c) Resources (teachers): ____________________________

____

(d) Resources (materials): ___________________________

____

(e) Research: ___________________________________

____

(f) Curricular structure: _____________________________

____

10. Can you provide the project staff with any other perceptions which will facilitate their efforts to define and integrate career education?

____

____

____

____

EXEMPLARY PROJECT IN CAREER EDUCATION

Great Falls Public Schools
Great Falls, Montana
1974

Evaluation Questionnaire

Career Education Specialists
Form III

Name: ______________________________ Date: __________

Present position: ______________________________

1. Numerous definitions have been proposed for the concept of career education. Would you please provide us with the definition which you employ in your work?

____

____

____

____

2. Can you provide us with a listing of schools or agencies who have effectively translated this definition into operational programs?

☐ No, I cannot.

☐ Yes, the following have:

(a) ______________________________

(b) ______________________________

(c) ______________________________

(d) ______________________________

3. Would you please describe the most effective strategies you have observed, relative to:

(a) development of career education curriculum? __________

____

____

(b) integration of career education into an established curriculum?

(c) development of the counselor's role in career education?

(d) involving the community:

(e) student work observation:

(f) student work experience:

(g) student employment:

(h) inter-agency coordination:

4. What do you perceive as the most important need in United States education which can be satisfied by career education activities?

5. What are the most productive career education project strategies you have observed in relation to:

(a) elementary curriculum development? ____________________

(b) secondary curriculum development? ____________________

(c) student placement (in the generic sense)? ____________________

(d) school staff development? ____________________

(e) project management? ____________________

Great Falls Public Schools
Great Falls, Montana

ACTION INVENTORY

Student

Career Education Project

Great Falls Public Schools
Career Education Project
ACTION INVENTORY

The purpose of this instrument is to determine the MEANING of certain things by having you rate them against a series of descriptive scales. In completing this inventory, please make your ratings of what these things mean to YOU.

On each page of this booklet you will find a different concept to be rated (judged) and beneath it a set of scales. You are to rate the concept on each of these scales, in order.

If you feel the concept at the top of the page is VERY closely related to one end of the scale, place your check-mark as follows:

GOOD _X_:___:___:___:___:___:___ BAD

or

GOOD ___:___:___:___:___:___:_X_ BAD

If you feel the concept is QUITE closely related to one or the other end of the scale (but not extremely), you should place your check-mark as follows:

GOOD ___:_X_:___:___:___:___:___ BAD

or

GOOD ___:___:___:___:___:_X_:___ BAD

If the concept seems only SLIGHTLY related to one side as opposed to the other side (but is not NEUTRAL), then you should check as follows:

GOOD ___:___:_X_:___:___:___:___ BAD

or

GOOD ___:___:___:___:_X_:___:___ BAD

The direction toward which you place your check, of course, depends upon which of the two ends of the scale seem most characteristic of the concept you are judging.

If you consider the concept to be NEUTRAL on the scale - both sides of the scale seem to be equally associated with the concept, then you should place your check-mark in the middle space. This type of feeling should seldom occur.

GOOD ___:___:___:_X_:___:___:___ BAD

Consider these examples:

TEACHING METHODS

Very Quite Slightly Neutral Slightly Quite Very

GOOD ____: __X__: ________: _______: ________: _____: ____ BAD

In this case, teaching methods were felt to be quite good.

SCHOOL CLASSROOMS

V Q S N S Q V

Meaningful ___:___:_X_:___:___:___:___ Meaningless

This example shows that school classrooms were felt to be slightly meaningful.

TEXTBOOK MEMORIZING

V Q S N S Q V

Meaningful ___:___:___:___:___:___:_X_ Meaningless

In this case, memorizing textbook passages was rated as very meaningless.

IT IS IMPORTANT THAT YOU:

(1) Place your check-mark in the middle of the space, not on the boundaries.

this not this

___:_X_:___:___:___:__X:___

(2) Be sure you check every scale for every concept - DO NOT OMIT ANY!

(3) Never put more than one check-mark on a single scale.

Sometimes you may feel as though you have checked the same item twice on the inventory. This will not be the case, so DO NOT LOOK BACK AND FORTH through the items.

MAKE EACH ITEM A SEPARATE AND INDEPENDENT JUDGEMENT

Work at a fairly high speed through this inventory. Do not worry or puzzle over individual items. It is your FIRST IMPRESSIONS, the IMMEDIATE FEELINGS you have about the items that we want to record and which are of use in this measurement procedure. On the other hand, please do not be careless; as we want your true impressions.

THIS IS NOT A TEST - THERE ARE NO RIGHT OR WRONG ANSWERS

At this time, go to the first concept on the following page. You should complete all of the items within twenty minutes.

HOW TO LOOK FOR WORK

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

PART TIME WORK

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

JOB INFORMATION

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

SCHOOL EMPLOYMENT OFFICE

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

EMPLOYERS

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

ADDITIONAL TRAINING

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

DECISIONS ABOUT MY FUTURE

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

THE SCHOOL TESTING PROGRAM

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

LEARNING ABOUT MYSELF

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

GETTING ALONG WITH OTHERS

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

MYSELF AS EMPLOYEE

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

MY HOBBIES

Good ___:___:___:___:___:___:___ Bad

Inferior ___:___:___:___:___:___:___ Superior

Unimportant ___:___:___:___:___:___:___ Important

Right ___:___:___:___:___:___:___ Wrong

Satisfactory ___:___:___:___:___:___:___ Unsatisfactory

Untimely ___:___:___:___:___:___:___ Timely

Meaningless ___:___:___:___:___:___:___ Meaningful

Useful ___:___:___:___:___:___:___ Useless

Regressive ___:___:___:___:___:___:___ Progressive

Approve ___:___:___:___:___:___:___ Disapprove

FAMILY MEMBERSHIP

Good ___:___:___:___:___:___:___ Bad

Inferior ___:___:___:___:___:___:___ Superior

Unimportant ___:___:___:___:___:___:___ Important

Right ___:___:___:___:___:___:___ Wrong

Satisfactory ___:___:___:___:___:___:___ Unsatisfactory

Untimely ___:___:___:___:___:___:___ Timely

Meaningless ___:___:___:___:___:___:___ Meaningful

Useful ___:___:___:___:___:___:___ Useless

Regressive ___:___:___:___:___:___:___ Progressive

Approve ___:___:___:___:___:___:___ Disapprove

SCHOOL SUBJECTS

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

OCCUPATIONAL TRAINING

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

CAREER EDUCATION

Good ___:___:___:___:___:___:___ Bad

Inferior ___:___:___:___:___:___:___ Superior

Unimportant ___:___:___:___:___:___:___ Important

Right ___:___:___:___:___:___:___ Wrong

Satisfactory ___:___:___:___:___:___:___ Unsatisfactory

Untimely ___:___:___:___:___:___:___ Timely

Meaningless ___:___:___:___:___:___:___ Meaningful

Useful ___:___:___:___:___:___:___ Useless

Regressive ___:___:___:___:___:___:___ Progressive

Approve ___:___:___:___:___:___:___ Disapprove

REQUIRED COURSES

Good ___:___:___:___:___:___:___ Bad

Inferior ___:___:___:___:___:___:___ Superior

Unimportant ___:___:___:___:___:___:___ Important

Right ___:___:___:___:___:___:___ Wrong

Satisfactory ___:___:___:___:___:___:___ Unsatisfactory

Untimely ___:___:___:___:___:___:___ Timely

Meaningless ___:___:___:___:___:___:___ Meaningful

Useful ___:___:___:___:___:___:___ Useless

Regressive ___:___:___:___:___:___:___ Progressive

Approve ___:___:___:___:___:___:___ Disapprove

COURSE IN CAREERS

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

WORK

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

EARNING AND MANAGING MONEY

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

GOING TO COLLEGE

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

RESPONDENT DATA

Your responses to this instrument will be confidential. However, for us to understand the data, it is necessary to categorize respondents.

Please provide the information requested below:

Today's date is:____

I am enrolled in Grade:___________________________________

My school is:____

My Grade Point Average is:________________________________

I have lived in Great Falls for ________ years.

My parents occupation: Father_______________ Mother___________

I have held the following jobs:______________________________

____

____

____

Great Falls Public Schools
Great Falls, Montana

ACTION INVENTORY

FORM A

Career Education Project

Great Falls Public Schools
Career Education Project
ACTION INVENTORY

The purpose of this instrument is to determine the MEANING of certain things by having you rate them against a series of descriptive scales. In completing this inventory, please make your ratings of what these things mean to YOU.

On each page of this booklet you will find a different concept to be rated (judged) and beneath it a set of scales. You are to rate the concept on each of these scales, in order.

If you feel the concept at the top of the page is VERY closely related to one end of the scale, place your check-mark as follows:

GOOD X :___:___:___:___:___:___ BAD

or

GOOD ___:___:___:___:___:___: X BAD

If you feel the concept is QUITE closely related to one or the other end of the scale (but not extremely), you should place your check-mark as follows:

GOOD ___: X :___:___:___:___:___ BAD

or

GOOD ___:___:___:___:___: X :___ BAD

If the concept seems only SLIGHTLY related to one side as opposed to the other side (but is not NEUTRAL), then you should check as follows:

GOOD ___:___: X :___:___:___:___ BAD

or

GOOD ___:___:___:___: X :___:___ BAD

The direction toward which you place your check, of course, depends upon which of the two ends of the scale seem most characteristic of the concept you are judging.

If you consider the concept to be NEUTRAL on the scale - both sides of the scale seem to be equally associated with the concept, then you should place your check-mark in the middle space. This type of feeling should seldom occur.

GOOD ___:___:___:_X_:___:___:___ BAD

Consider these examples:

TEACHING METHODS

Very Quite Slightly Neutral Slightly Quite Very

GOOD ____: _X__: ________: _______: ________: _____: ____ BAD

In this case, teaching methods were felt to be quite good.

SCHOOL CLASSROOMS

V Q S N S Q V

Meaningful ___:___:_X_:___:___:___:___ Meaningless

This example shows that school classrooms were felt to be slightly meaningful.

TEXTBOOK MEMORIZING

V Q S N S Q V

Meaningful ___:___:___:___:___:___:_X_ Meaningless

In this case, memorizing textbook passages was rated as very meaningless.

IT IS IMPORTANT THAT YOU:

(1) Place your check-mark in the middle of the space, not on the boundaries.

this not this

___:_X_:___:___:___:_X:___

(2) Be sure you check every scale for every concept - DO NOT OMIT ANY!

(3) Never put more than one check-mark on a single scale.

Sometimes you may feel as though you have checked the same item twice on the inventory. This will not be the case, so DO NOT LOOK BACK AND FORTH through the items.

MAKE EACH ITEM A SEPARATE AND INDEPENDENT JUDGEMENT

Work at a fairly high speed through this inventory. Do not worry or puzzle over individual items. It is your FIRST IMPRESSIONS, the IMMEDIATE FEELINGS you have about the items that we want to record and which are of use in this measurement procedure. On the other hand, please do not be careless; as we want your true impressions.

THIS IS NOT A TEST - THERE ARE NO RIGHT OR WRONG ANSWERS

At this time, go to the first concept on the following page. You should complete all of the items within twenty minutes.

STUDENT EMPLOYMENT

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

ON-SITE CAREER EXPERIENCE

Good ___:___:___:___:___:___:___ Bad

Inferior ___:___:___:___:___:___:___ Superior

Unimportant ___:___:___:___:___:___:___ Important

Right ___:___:___:___:___:___:___ Wrong

Satisfactory ___:___:___:___:___:___:___ Unsatisfactory

Untimely ___:___:___:___:___:___:___ Timely

Meaningless ___:___:___:___:___:___:___ Meaningful

Useful ___:___:___:___:___:___:___ Useless

Regressive ___:___:___:___:___:___:___ Progressive

Approve ___:___:___:___:___:___:___ Disapprove

CONTINUING EDUCATION

Good ___:___:___:___:___:___:___ Bad

Inferior ___:___:___:___:___:___:___ Superior

Unimportant ___:___:___:___:___:___:___ Important

Right ___:___:___:___:___:___:___ Wrong

Satisfactory ___:___:___:___:___:___:___ Unsatisfactory

Untimely ___:___:___:___:___:___:___ Timely

Meaningless ___:___:___:___:___:___:___ Meaningful

Useful ___:___:___:___:___:___:___ Useless

Regressive ___:___:___:___:___:___:___ Progressive

Approve ___:___:___:___:___:___:___ Disapprove

EMPLOYERS

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

CAREER EXPLORATION

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

OCCUPATIONAL AWARENESS

Good ___:___:___:___:___:___:___ Bad

Inferior ___:___:___:___:___:___:___ Superior

Unimportant ___:___:___:___:___:___:___ Important

Right ___:___:___:___:___:___:___ Wrong

Satisfactory ___:___:___:___:___:___:___ Unsatisfactory

Untimely ___:___:___:___:___:___:___ Timely

Meaningless ___:___:___:___:___:___:___ Meaningful

Useful ___:___:___:___:___:___:___ Useless

Regressive ___:___:___:___:___:___:___ Progressive

Approve ___:___:___:___:___:___:___ Disapprove

CAREER COUNSELLING

Good ___:___:___:___:___:___:___ Bad

Inferior ___:___:___:___:___:___:___ Superior

Unimportant ___:___:___:___:___:___:___ Important

Right ___:___:___:___:___:___:___ Wrong

Satisfactory ___:___:___:___:___:___:___ Unsatisfactory

Untimely ___:___:___:___:___:___:___ Timely

Meaningless ___:___:___:___:___:___:___ Meaningful

Useful ___:___:___:___:___:___:___ Useless

Regressive ___:___:___:___:___:___:___ Progressive

Approve ___:___:___:___:___:___:___ Disapprove

STUDENT SELF-AWARENESS

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

PREPARATION FOR THE FUTURE

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

CAREER EDUCATION RESOURCES

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

FINANCIAL RESPONSIBILITY

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

DIGNITY OF WORK

Good ___:___:___:___:___:___:___ Bad

Inferior ___:___:___:___:___:___:___ Superior

Unimportant ___:___:___:___:___:___:___ Important

Right ___:___:___:___:___:___:___ Wrong

Satisfactory ___:___:___:___:___:___:___ Unsatisfactory

Untimely ___:___:___:___:___:___:___ Timely

Meaningless ___:___:___:___:___:___:___ Meaningful

Useful ___:___:___:___:___:___:___ Useless

Regressive ___:___:___:___:___:___:___ Progressive

Approve ___:___:___:___:___:___:___ Disapprove

RESPONDENT DATA

Your responses to this instrument will be confidential. However, for us to understand the data, it is necessary to categorize respondents.

Please complete each of the appropriate sections below:

Today's date is:________________________________

I. I am a:

☐ Teacher (Grade:_____ School:______________________________)

☐ Counselor (School:______________________________)

☐ Administrator (School:______________________________)

II. Demographic data

Number of years experience:________________

Number of years in this district:___________

Number of years in this building:___________

Age: 20-25 ☐ 35-40 ☐ 50+ ☐

25-30 ☐ 40-45 ☐

30-25 ☐ 45-50 ☐

III. Educational History

College/University	Degree(s) Received	Year Received	Major	Minor

B. Teaching Responsibilities

☐ (1) Elementary Teacher

When ______________

No. years __________

☐ (2) Secondary Teacher

List all major course responsibilities, beginning with those you are presently teaching.

Course	When	No. years

IV. School District Activities:

A. Committee Assignments

Name of Committee	Role (chairman, sec., member, etc.)	Year(s) member

B. Other Activities:____

____

____

Great Falls Public Schools
Great Falls, Montana

ACTION INVENTORY

FORM B

Career Education Project

Great Falls Public Schools
Career Education Project
ACTION INVENTORY

The purpose of this instrument is to determine the MEANING of certain things by having you rate them against a series of descriptive scales. In completing this inventory, please make your ratings of what these things mean to YOU.

On each page of this booklet you will find a different concept to be rated (judged) and beneath it a set of scales. You are to rate the concept on each of these scales, in order.

If you feel the concept at the top of the page is VERY closely related to one end of the scale, place your check-mark as follows:

GOOD _X_:___:___:___:___:___:___ BAD

or

GOOD ___:___:___:___:___:___:_X_ BAD

If you feel the concept is QUITE closely related to one or the other end of the scale (but not extremely), you should place your check-mark as follows:

GOOD ___:_X_:___:___:___:___:___ BAD

or

GOOD ___:___:___:___:___:_X_:___ BAD

If the concept seems only SLIGHTLY related to one side as opposed to the other side (but is not NEUTRAL), then you should check as follows:

GOOD ___:___:_X_:___:___:___:___ BAD

or

GOOD ___:___:___:___:_X_:___:___ BAD

The direction toward which you place your check, of course, depends upon which of the two ends of the scale seem most characteristic of the concept you are judging.

If you consider the concept to be NEUTRAL on the scale - both sides of the scale seem to be equally associated with the concept, then you should place your check-mark in the middle space. This type of feeling should seldom occur.

GOOD ___:___:___:_X_:___:___:___ BAD

Consider these examples:

TEACHING METHODS

Very Quite Slightly Neutral Slightly Quite Very

GOOD ____: _X_ : ________: _______: ________: _____: ____ BAD

In this case, teaching methods were felt to be quite good.

SCHOOL CLASSROOMS

V Q S N S Q V

Meaningful ___:___:_X_:___:___:___:___ Meaningless

This example shows that school classrooms were felt to be slightly meaningful.

TEXTBOOK MEMORIZING

V Q S N S Q V

Meaningful ___:___:___:___:___:___:_X_ Meaningless

In this case, memorizing textbook passages was rated as very meaningless.

IT IS IMPORTANT THAT YOU:

(1) Place your check-mark in the middle of the space, not on the boundaries.

this not this

___:_X_:___:___:___:___X:___

(2) Be sure you check every scale for every concept - DO NOT OMIT ANY!

(3) Never put more than one check-mark on a single scale.

Sometimes you may feel as though you have checked the same item twice on the inventory. This will not be the case, so DO NOT LOOK BACK AND FORTH through the items.

MAKE EACH ITEM A SEPARATE AND INDEPENDENT JUDGEMENT

Work at a fairly high speed through this inventory. Do not worry or puzzle over individual items. It is your FIRST IMPRESSIONS, the IMMEDIATE FEELINGS you have about the items that we want to record and which are of use in this measurement procedure. On the other hand, please do not be careless; as we want your true impressions.

THIS IS NOT A TEST - THERE ARE NO RIGHT OR WRONG ANSWERS

At this time, go to the first concept on the following page. You should complete all of the items within twenty minutes.

STUDENT SATISFACTION IN WORK

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

STUDENT WORK EXPERIENCE

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

CAREER DECISION-MAKING

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

A PLANNED FUTURE

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

CHOOSING A CAREER

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

WORK-CURRICULUM RELATIONSHIP

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

DEVELOPMENT OF AVOCATIONS

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

VOCATIONAL PREPARATION

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

SUBJECT MATTER RELEVANCE

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

A CAREER EDUCATION CURRICULUM

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

CITIZENSHIP RULES

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

FAMILY ROLES

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

RESPONSIBILITY FOR TEACHING CAREER EDUCATION

Good ____:____:____:____:____:____:____ Bad

Inferior ____:____:____:____:____:____:____ Superior

Unimportant ____:____:____:____:____:____:____ Important

Right ____:____:____:____:____:____:____ Wrong

Satisfactory ____:____:____:____:____:____:____ Unsatisfactory

Untimely ____:____:____:____:____:____:____ Timely

Meaningless ____:____:____:____:____:____:____ Meaningful

Useful ____:____:____:____:____:____:____ Useless

Regressive ____:____:____:____:____:____:____ Progressive

Approve ____:____:____:____:____:____:____ Disapprove

RESPONDENT DATA

Your responses to this instrument will be confidential. However, for us to understand the data, it is necessary to categorize respondents.

Please complete each of the appropriate sections below:

Today's date is:________________________________

I. I am a:

☐ Teacher (Grade:_____ School:____________________________)

☐ Counselor (School:______________________________________)

☐ Administrator (School:__________________________________)

II. Demographic data

Number of years experience:________________

Number of years in this district:____________

Number of years in this building:____________

Age: 20-25 ☐ 35-40 ☐ 50+ ☐

25-30 ☐ 40-45 ☐

30-25 ☐ ~~46~~45-50 ☐

III. Educational History

College/University	Degree(s) Received	Year Received	Major	Minor

B. Teaching Responsibilities

☐ (1) Elementary Teacher

When ______________

No. years __________

☐ (2) Secondary Teacher

List all major course responsibilities, beginning with those you are presently teaching.

Course	When	No. years

IV. School District Activities:

A. Committee Assignments

Name of Committee	Role (chairman, sec., member, etc.)	Year(s) member

B. Other Activities: ____

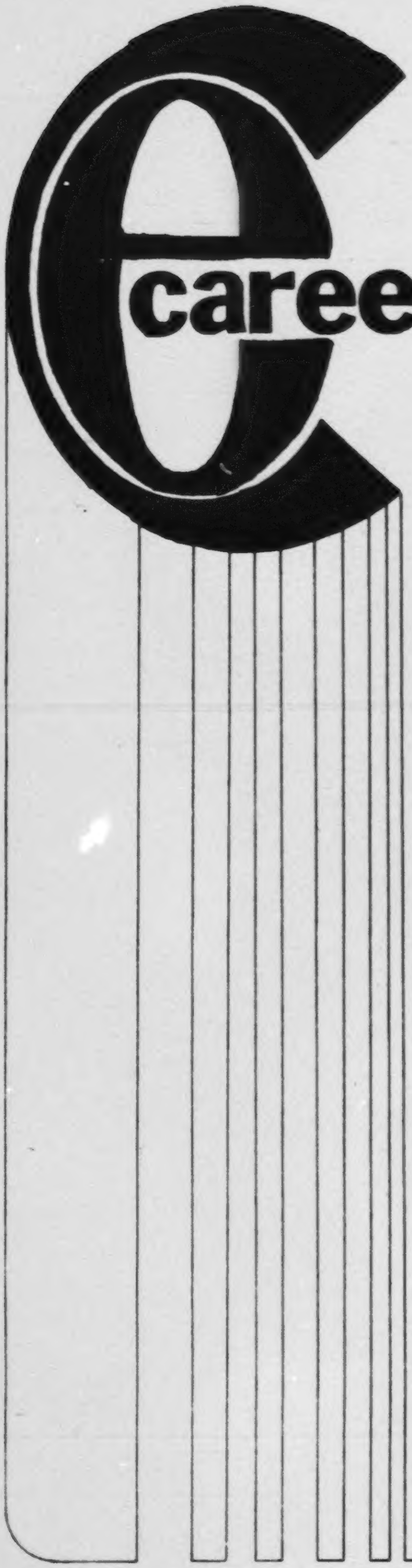
____

____

APPENDIX C

PREFACE

These edited versions of interim reports have been included to provide the reader with insight into the developmental nature of the project and with brief summaries of evaluation data and recommendations emergent from that data. Those interested in the details of statistical treatments and analyses are referred to the unedited reports of June 30, 1974 and June 30, 1975.



career education

First year interim report

An Exemplary Career Education Program
in the Great Falls Public Schools

Great Falls Public Schools
1100 Fourth Street South
Great Falls, Montana 59401

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SUMMARY OF THE REPORT

A. Time Period Covered

July 1, 1973 to June 30, 1974.

B. Goals and Results

The original proposal for this project described numerous changes in student behavior to be effected by the project. The desired student outcomes ranged from heightened awareness of career options at the elementary level to specific occupational skills at the post high school and adult levels. The continuum of knowledge and skills described was in close accord with the most widely published model of Career Education.

However, achievement of the student outcomes described was predicated upon a fully developed Career Education curriculum and the support mechanism necessary to operationalize that curriculum. Neither of these conditions existed at the time of initial project funding. Consequently project energies were focused upon development of those functions which would ultimately enable desired student outcomes to obtain. This made necessary the establishment of a new developmental structure for the project.

The four major areas subsequently addressed by the project were related to (1) curriculum development, (2) provision of necessary counseling services, (3) establishment of a functional placement program, and (4) the design of those management procedures which would incur efficient and effective operation of the total effort. Achievements of the project in this definition and development effort are summarized below.

Goal 1: Curriculum Development. A great deal of progress was made during this first year in redefining district curriculum to more accurately reflect the philosophy of Career Education adopted by the project. This philosophy establishes a commitment to maximize curricular relevance for students at all levels, which in turn has required that significant revision be made in curricular content and instructional strategies employed by teachers. Each of these concerns has been systematically addressed by special groups functioning under project supervision.

A most important and often overlooked consideration in effecting curricular revision is a precise identification of what career education emphasis currently exists within the curriculum. The intent in emphasizing this strategy for curricular revision is to maximize benefits from these revision processes by initiating new activities at the level of current development. This factor has been carefully addressed by the project in numerous ways, such as identification of available material, identifying staff perceptions of their roles, and determination of strategies currently employed which can most readily accommodate a Career Education emphasis.

Goal 2: Counseling Services. Much of the literature related to Career Education places strong emphasis upon student guidance and counseling at every instructional level. This same emphasis is reflected during this past year. Included among these efforts have been identifying counselor perceptions of their roles in a Career Education program, design of career information centers for use by students, experimental use of several tests to determine which might provide the most useful counseling information, and determining student perceptions of their most pressing counseling needs. The intent during the second project year will be to integrate a variety of counseling functions into a diffuse but precisely targeted counseling program. Plans for continuing the necessary data bases to achieve this goal have been established during this first year of operation.

Goal 3: Placement Services. In many respects this goal of the project is one of the more critical, for it includes much more than the title describes. For use within the project this goal has included such diverse concerns as establishing a functional work experience program, articulation of a post high school program, and integration of services available from a variety of private and governmental agencies throughout the community.

Accomplishments of the project during the past year in relation to this goal have been excellent. Examples include the following:

1. An inventory of over 350 work experience stations has been established.
2. Representatives from both private and government employment agencies have met to discuss how they can each support the philosophy of Career Education.
3. Various kinds of "needs" studies have been completed in cooperation with the local Boy Scout Council.
4. Representatives from labor organizations have been closely involved in development of an effective work experience program.
5. Major constraints to fully operationalize a comprehensive work experience program have been identified and initial coping strategies have been designed.

A great deal of work remains to be done in relation to this goal -- primarily because of the sweeping nature of the goal and the complexities of effecting close community involvement. However, systematic progress has been made toward achieving the desired ends.

Goal 4: Management. Management, by definition, is a process of employing various resources to achieve a pre-determined goal, with the most important task frequently being the establishment of meaningful and appropriate goals. During this past year, project management activities have been two-dimensional. One has focused upon providing support to project staff such that goals could be achieved. The other has focused upon establishing a viable concept of Career Education for the Great Falls schools. A concurrent concern has been the design of those strategies which would be needed to operationalize a Career Education philosophy within the total school district. Each of these management tasks has been completed during this past year.

An especially noteworthy accomplishment has been the identification of an extensive array of resources for use during subsequent years of the project. There can be little doubt as to the adequacy of the resource base which has been established for future Career Education activities.

Perhaps of equal importance are the variety of baselines which have been established to assess future project effects and the strong staff development program initiated. In this latter respect, the project developed a mediated presentation which has been used throughout the District, and over 10% of the professional staff have completed an intensive course in Career Education.

C. Conclusions and Recommendations

Generally, as shown by data presented in later sections of this report, it can be concluded that the project has achieved the definition and development goals established for this first year of operation. The few areas in which deficiencies were noted were inconsequential to the overall intent of the project.

During succeeding years of the project it is recommended that a more precise focus be established in each of the major development areas and that systematic procedures be employed to effect full integration of a Career Education philosophy. This recommendation is congruent with the general plans of the project -- as shown in the model of the conceptual structure employed -- and consequently should not necessitate any serious revisions of future plans.

I. DESCRIPTION OF THE PROJECT

A. Philosophy and Definition of Career Education Employed

The purpose of this project has been to provide in-service training for school district staff and to implement an exemplary program in Career Education at all grade levels. Additionally, the intent has been to integrate the combined efforts of local people, staff from the State University system, staff of the State Department of Education, and others which would culminate in a demonstration program available for observation and/or adaptation by school districts throughout the State of Montana.

The Broader Context For The Concept of Career Education. The problems addressed by this project were succinctly defined in the original proposal. These included such diverse areas as the inadequate preparation of youth to accept the reality of constructive pathways to adulthood, the many facets of the dropout problem, the range of possible careers from which a student is expected to make a selection, inadequate counseling services, and a failure on the part of public schools to fully capitalize upon the many educational resources existent within their environment.

The problem, and therefore the context for the project, is not one of developing a specific curriculum but rather one of developing and installing a new philosophy and institutional emphasis for school programs. The concept of Career Education is pervasive. It may be found in all disciplines, at every level, and related to nearly every learning experience to which a student is subjected.

These various problems have been addressed directly in the planning and operations of this project. In many respects, the concept of Career Education is an attempt to provide an organizational construct for the development of a total education system -- an organizational focus which will ensure that curricula are perceived as meaningful and relevant by learners, not just educators. Education has known for some time the conditions which should exist in the schools to facilitate effective learning by students. Despite this, our curricula were not satisfactory. They needed a more meaningful focus which would facilitate the development of programs to satisfy the long-range needs of learners and which would serve to more fully integrate the variety of resources available to educational institutions. It was to facilitate this integration that the concept of Career Education was introduced by Dr. Sidney P. Marland, Jr., Assistant Secretary for Education, U.S. Department of Health, Education and Welfare. In a recent publication, Dr. Marland noted that the principles and concepts underlying Career Education are not new. Generally, as explained by Dr. Marland, Career Education seeks to remove the distinctions between academic and occupational learning programs, which will enable them to serve all learners at all levels of instruction in their quest for productive careers and rewarding lives. He traced the history of the idea through a series of significant theoreticians, including James Russell, John Dewey, Alfred North Whitehead, and James Conant.

One of the initial activities of the project staff was to establish, in writing, a set of goals which described the desired outcomes from the total development effort. Once the project had established a set of viable developmental goals, it then became necessary to define a number of terms and/or concepts which were employed in the goal statement. This definition process was necessary to achieve the desired degree of precision in terminology such that project staff could ensure uniform communications both within the staff and between themselves and their clientele. This definition of terms also served to set the tenor for the development of viable objectives for the project and to establish parameters for the evaluation.

By carefully and systemmatically identifying included objectives within each of the goal areas, the project staff were able to adapt their work to the conceptual structure described earlier. For example, the definition level of development was defined as Phase I of project activities. Generally, Phase I would encompass most of the first year's activities and included defining such elements as:

1. Necessary teacher knowledge for purposes of structuring in-service training;

2. Determination of student outcomes to be facilitated by in-service training;

3. Identification of
   (a) Career Education elements presently manifest in the schools,
   (b) Strategies for implementing Career Education at all levels,
   (c) Roles for teachers, principals and specialists in regard to career counseling;

4. Order and/or arrange clusters in priorities to serve as the framework for Career Education instruction at all grade levels;

5. Inventory of community resources;

6. The need and purpose for advisory group planning sessions; and

7. Those dimensions of project activities to be addressed by an independent evaluation.

Phase II of the project development effort, the design phase, included such activities as:

1. Continued in-service training;

2. "Special" in-service to identify roles for improving career guidance and counseling;

3. In-service training related to the design of instructional programs and packages;

4. In-service training to improve career aptitude testing procedures;

5. Use of evaluation data to conduct a review of, and revise as necessary, program operations.

Phase III related to the development and installation of specific kinds of Career Education programs. This will include continued training for staff, adding cluster programs at various grade levels, improving the output of testing programs relative to Career Education, and continued development of instructional plans and packages for operationalizing the concept of Career Education.

Project Objectives. As a result of these rigorous development procedures, the project staff was able to produce a set of objectives which were internally consistent and which represented the desired Career Education outcomes for the Great Falls Public Schools. This set of objectives served to structure all subsequent project activities including the generation of those data which would facilitate derivation of new objectives and revision of project operations.

The complete listing of goals and objectives developed by the project staff are presented in the final report.

B. Needs Addressed By The Project

Introduction. The basic need addressed by this project has been the absence, within the Great Falls Public Schools, of an organizational construct which would facilitate the development of a meaningful and relevant curriculum. Because of this absence, the Great Falls schools decided to focus upon Career Education and to implement those strategies which would facilitate the diffusion of Career Education throughout the entire educational structure. The expected outcomes from the project, as described in the original proposal, were:

1. An increased student awareness of the broad range of options in the world of careers;
2. A reduction of school dropouts;
3. An increase in vocational guidance services;
4. Students making more realistic career choices;
5. A more relevant school curriculum;
6. An increase in educational and job placement; and
7. Total involvement of both teachers and administration in Career Education.

It was at once apparent that this was a monumental undertaking by the Great Falls Public Schools. It was because of the scope and complexity of desired outcomes that it was necessary to follow the exacting definition and development procedures described earlier.

II. PROCEDURES FOLLOWED BY THE PROJECT

The procedures followed during the first year of the project centered on the definition phase of the conceptual model. Staff development, both project and district, received major emphasis. Site visits, study of professional literature, and examination of materials produced by other projects were initial activities. A graduate in-service education course enrolled ten per cent of the district certificated staff.

The classification of objectives into the four broad areas of (1) curriculum, (2) counseling, (3) placement and work experience, and (4) management, facilitated task assignment. Committees were organized in each of the first three areas above and represented all schools, grade levels, academic disciplines, counselors, administrators, and in some cases, members of the business/labor community in [illegible] advisory capacity.

A. Curriculum Development

Cross-grade level and inter-disciplinary planning were initiated through regular meetings of the Secondary and Elementary Curriculum Committees and the graduate in-service program. District curriculum specialists were included as necessary and timely.

B. Counseling

This component was divided into Elementary, Secondary, and School Incentive Committees to assess needs at the elementary level, improve services and career guidance at the secondary level, and to determine action necessary to increase holding power.

C. Placement and Work Experience

This committee included district and project staff, Montana Employment Security personnel, labor representatives, and private personnel and placement agencies. Its function was to develop those procedures necessary for job placement which would be congruent with labor legislation and local practices. Location of sites and development of out-of-school learning experiences were also considered.

D. Project Management

Integrating project goals and/or activities with those of the district was of primary importance. Activities were not discrete. There is overlap in objectives and frequently tasks are assigned to more than one staff member.

III. EVALUATION OF THE PROJECT

A. Introduction

The most apparent and significant problem confronted in the design and execution of this evaluation has been the pervasive nature of the concept of Career Education and an associated lack of definition for desired outcomes at each of several levels. Expected outcomes listed in the proposal described a set of conditions toward which nearly all education is oriented. This description of an "ideal" posed one of the more difficult problems as typically, little agreement exists among educators about what criteria should be associated with a set of "ideal" conditions or what strategies will enable these conditions to obtain.

The first year of project operations was oriented primarily to definition processes. The intent in following this strategy was to effect the desired levels of definition such that a more precise design for a Career Education curriculum could be affected during following years of the project. As shown in the model, both within the school context and the broader community.

B. The Evaluation Context

These inherent complexities, and the absence of a prior definition for the major constructs largely prescribed the nature of the evaluation. Generally, the evaluation was conceptionalized as a long-term effort, with the first and second years of project operations being primarily information-based evaluation studies. During the third year of project operations, when the project will be seeking to establish the generalizability of a developed model, the evaluation will be predicated largely on conclusion-oriented studies. However, political realities require decision-information of various types, at different levels, throughout a project's history. Therefore, some evaluation activities employed traditional design and analysis models, e.g., prepost-testing procedures on specified dimensions; establishment of baselines for purposes of assessing change; etc. Generally, this rationale is consistent with the conceptual structure of the project—definition, design, development, and installation.

Definition for evaluation employed. Evaluation, as employed in this project, is a continuous process involving the constant examination and reappraisal of activities and policies which facilitate making rational decisions between often conflicting alternatives. It includes identifying, or specifying, an information need and collecting, analyzing, and reporting information which will alleviate that need. Ultimately, such evaluation information should lead to some action. If it does not, then the utility of the evaluation effort must be seriously questioned.

The concept of evaluation as employed in this project, is not a product, but rather a means of enhancing and operationalizing definitions for project intents, and simultaneously maximizing the benefits to derive from consumption of available resources. The intent has been to provide that kind of information required for planning and managing the project and for ultimately describing the strengths and deficiencies of the project relative to desired outcomes.

Construct Definition and Measurement Procedures. A well designed evaluation should have a restricted and thoroughly defined audience. This requires that information be collected not just for the record or to be used at some future date for theory building. Instead, it becomes the evaluators' responsibility to work with all levels of decision-makers and determine what information will be relevant and valued. Attention must also be directed toward "what" is to be evaluated. In this latter instance, the process employed will ultimately describe decision situations to be served, the environment within which the evaluation is to occur, and to specify those policies which will govern the evaluation.

The general referent for accomplishing these tasks is typically derivation of a definition for the evaluation context--defining those elements, or factors, within the environment which surround and influence the project and the total educational program. In this situation, it is necessary to extract from the multitudinous variables extant, those which are relative and meaningful to the value systems and needs of specified decision-makers. To define the evaluation context in this way is to give it meaning; with meaning, in this situation, referring to visible and communicable indicators for the variables of concern and observable manifestations of those variables.

This definition process is a necessary requirement to effect valid and useful measurement procedures. Through this definition process, the constructs to be observed are identified and their properties carefully specified. This is a fundamental operation in any measurement process. In this evaluation the primary constructs observed were: (1) curriculum planning and development; (2) placement procedures, with placement being broadly defined; (3) Career Education counseling; and (4) project management. However, simply identifying, or naming, these constructs do not provide sufficient information about them to support useful measurement procedures. It is not sufficient to simply state that a given program has been designed to insure students' abilities to make wise career choices or to coordinate curriculum development efforts. Necessary definitions must go considerably beyond this and specify what dimensions of project operations are to ultimately be manifest in observable effects upon students, manifestation of career education goals, and how these are to be quantified.

C. Purpose for the Evaluation

The second factor considered in this evaluation was that the project does not exist as a completely separate, totally autonamous, entity.

Requirements also exist for a different type of information than that needed by the project staff. These requirements are those which are oriented toward generalization, or diffusion, of terminal products. In effect, these information requirements are conclusion-oriented, whereas project requirements are decision-oriented.

Because of these differing information needs, it was decided to be in the best interests of both the project staff and the project sponsor to consider the information needs of each from initiation of the project.

Fig. 1

Differentiating Project Information Needs From Sponsor Information Needs

Information Needs			Evaluation Role
Level	Type	Formative (Definition/ Decision oriented)	Summative (Accountability and Generalization)
Project	Staff Functioning		
	Project Outcomes-Performance		
Sponsor	Staff Functions		
	Project Activities		
	Program Sponsor		

Evaluation Model Employed. While several alternative evaluation models could have been employed to structure this evaluation, the model developed by Stake appeared to be most congruent with the intents and information needs of both the project and the project sponsor.

Fig. 2

The Stake Evaluation Model

Descriptive Matrix			Judgment Matrix	
	Intents (planned)	Observations (measures)	Relative Criteria	Absolute Criteria
Conditions Antecedents Transactions Outcomes				

The model graphically illustrates that formative and continued development of a project is typically directed by three sets of intents: (1) a set of characteristics describing project preconditions (antecendents); (2) the set of development actions that are intended (transactions); and (3) the set of expected outcomes, or products, of the project. The logic inherent in the model is that evaluation of a project is two-dimensional. The first is an examination of the contingencies within and between each of the three sets of intents. The second is an examination of the congruence between a set of intents and of corresponding observations.

Application of the Model. Perhaps the major strength of the model in this evaluation was that, while it provided a structure for conceptualizing the design, it did not impose constraints upon types of data to be employed or decision processes which could be served. Consequently, it was employed in developing all pertinent dimensions of this evaluation.

The model is especially useful for satisfying accountability requirements, in that it facilitates a comparison of project plans and actual events--which relates directly to the most widely used definition of accountability. It also facilitated identification of what products and/or activities the project was to be accountable for, i.e., the project should expect to be accountable only for those activities and/or products which actually consumed project resources.

Objectives for the Evaluation. In a developmental program, such as the Great Falls Exemplary Project in Career Education, the primary purpose for an evaluation was to supply timely, credible, and manageable information that would support project staff in meeting four basic responsibilities. These are:

1. Establishment of meaningful and valid criteria for project outcomes;
2. Effective and prudent use of project resources to attain project goals;
3. Objective and useful dissemination of information to the educational community and other concerned publics;
4. Accountability to the sponsoring agency.

Generally, satisfaction of these responsibilities required first, a full and accurate description of project staff operations; and second, comparison of present and future manifestations of the project goals in student behavior. The conceptual structure for the general design of the total evaluation effort is shown in the conceptual design on the following page.

Fig. 3

Conceptual Design for the Total Evaluation

Phase Procedure	Definition	Design	Installation and Integration
Pre-Design			
Design			
Implementation			

This structure generally follows the conceptual model for the project presented earlier. In effect, the various phases of the evaluation were applied to first year project activities. These same phases may be applied to the major emphases of the project during the remaining two years of proposed funding. For example, one of the major emphases of the project during this past year has been to effect a more precise level of definition for the primary constructs of concern, e.g., career education, integration of community resources, development of career education curricula, etc. Typical activities conducted during this past year in the predesign phase included the design and conduct of interviews with project staff, teachers, administrators, local employers, and related agencies for purposes of establishing criteria for project objectives and determining information needs of members from these various groups. A second activity in the predesign phase has been to identify administrative constraints to conduct of the evaluation.

Typical activities during the design phase, during this past year, have included such things as (1) derive and verify indicators, measures, sampling, reporting procedures, etc. for each of the major project goals; (2) identify specific studies which need to be conducted in succeeding years of the project; (3) design an information feed-back system for use by project staff; and (4) identify those record data which would serve a project accountability purpose.

Activities included within the implementation procedure were: (1) management of the total evaluation effort; and (2) revision of the evaluation as new information dictated. The reader is cautioned not to interpret this last implementation activity as reflecting an undefined procedure. Instead, this type of activity is necessary when the evaluation is designed to satisfy the decision processes employed by the project. A parallel activity included the conduct of those studies which would provide necessary data for effecting generalization of the model to other school settings.

Objectives for this evaluation were designed to provide those data which would assist the project staff in their efforts to satisfy the basic responsibilities listed earlier. Specific objectives for the evaluation were to:

1. Provide those descriptive data which would assist the project staff in establishing desired outcomes and criteria for their attainment;
2. Provide information specified by project staff which would enhance their capability to effectively and efficiently allocate project resources;
3. Provide information which would enable the project staff to prioritize project outcomes and activities of the project;
4. Describe each project component in a manner which would enable other agencies to adopt or adapt specific components;
5. Provide information to project staff and associated persons which would support their decision-making capability relative to revision, extension, or termination, of selected project components;
6. Provide those data which would facilitate determination of which activities and/or products would generalize to other settings, and which may, therefore, function as components of a transportable model;
7. Determine, within the ability to define and measure them, program effects upon the career patterns of students;
8. Design and conduct evaluation studies which would measure the degree to which annual project objectives were achieved.

Audiences for the evaluation. During this first year of the project, the intent has been to generate a variety of data which would facilitate definition of key constructs by project staff. This emphasis suggests the primary audience for the evaluation has been the project staff. However, because of the project intent to develop a generalizable model, other school districts and the project sponsor will also be interested in knowing about the achievements of the project and problems encountered.

The potential effects of the project are wide-reaching, and consequently, could have a significant impact upon many dimensions of the community. Consequently, this report may also be of value to directors of other programs which are designed to integrate the concept of Career Education into ongoing school curricula.

Decisions to be Served by the Evaluation. Generally, evaluative data is most useful in facilitating decisions related to revision of existing components, extension of existing components, termination of existing components, or development of needed components. In the case of the first decision category, information related to the effectiveness and perceived benefits from a given course of action may be used to restructure that program to make it maximally beneficial to participants. The second decision category relates primarily to extending or enhancing some component which is already part of the total system. In effect, these data show where additional efforts are necessary and the general nature of those efforts. The third decision category relates to identification of those program components which had little or no effect upon participants, and consequently, attainment of project objectives. This being the case, those components should be removed from the program as they tend only to decrease the efficiency of the program. The final decision category relates to identified needs which remain unsatisfied by any of the project components. When this condition obtains, then additional project effort should be expended in an attempt to satisfy those needs.

D. Data Generation Procedures

Introduction. During the initial design stages of this evaluation, it became apparent that a single procedure for collecting the necessary data would not suffice. Because of the developmental nature of the project, an attempt was made to bring several divergent points of view to bear upon significant aspects of the project such as the definition of Career Education, integration of community resources with school programs, etc.

This attempt to clarify many of the possible alternative courses of action for the project ultimately led to employing four different types of data generation strategies. These included interviews, questionnaires, a previously completed "needs" assessment study, and project record data--those data routinely emergent from project operations.

Data Collection Procedures. Fifteen questionnaires, two attitude scales, and four standardized tests were employed to collect data for the conduct of this evaluation. These instruments were completed by project staff, teachers, administrators, counselors, local employers, representative labor and management groups, parents within the community, recognized authorities in Career Education, and various samples of students from throughout the district.

Copies of all instruments which were employed in this evaluation are included as Appendix A to this report.

Sampling Procedure and Instrument Distribution. Because of the process orientation for this evaluation, and the nature of information desired, establishment of critical confidence limits for the data was not deemed essential. Consequently, although samples employed were very carefully selected, they were relatively small. In several cases where the total number of respondents available was quite limited, one hundred percent of that population was asked to complete various instruments. Specific examples of this latter sampling strategy included counselors, work coordinators, principals, and members of the advisory board.

In the case of teachers, labor representatives, and employers, random samples of individual respondents were selected. Students were sampled by intact groups which had been randomly identified from among all available groups within the school district. The parent sample was not randomly selected due to the inherent distribution problems which would be encountered from this sampling strategy.

E. Report of Evaluation Data Related to Goal Attainment

Introduction. The process orientation of this evaluation, as discussed in the rationale section of this report, was adopted to satisfy both the short and long range planning needs of the project and to serve identified information needs of the project during the definition and development stages. A concomitant concern has been to satisfy received information needs of the project's sponsor and to establish baselines for succeeding years of project operations.

The need to satisfy diverse information requirements necessitated the establishment of several reporting categories which were not related solely to project goals. For example, many of the project activities were developmental in nature and as a consequence a single activity would relate to more than one of the project goals. However, to satisfy project accountability, it was felt necessary to report these kinds of activities.

Because of these varying information requirements, this section of the report has been organized into seven components. The first four describe the various activities and accomplishments of the project in relation to each of the four major project goals. The next section describes those baselines which have been established for future use by the project. The last two components of this section include those data which describe project development activities and those data which should set aside project accountability requirements. Accountability, in this case, has been defined as project awareness by those clientele served by the project, the degree to which installation of a Career Education curriculum has obtained, model generalizability or transportability, etc. Development activities reported include such things as in-service training, role definition activities, material resource identification and acquisition, and identification of trends in Career Education which may be used to establish long range goals for the project.

Goal 1: Curriculum Development. Curriculum development concerns of the project have focused primarily upon development of content outlines for a Career Education program and strategies to effect integration of that program into the ongoing curriculum. For reporting purposes, these concerns have been organized into four general categories of project activities. These are: (1) Development of a scope and sequence; (2) Content outlines; (3) Instructional strategies; and (4) Inventory of available resources.

Goal 2: Counseling. Counseling roles, in a Career Education effort, have been described as one of the more critical elements to be refined if the concept of Career Education is to become fully developed. Generally, the counseling goal for this project has been oriented toward development of the student's self-awareness and his capability to use a variety of data in making career decisions. Project activities designed to assure attainment of this goal have focused upon familiarizing counselors with the concept of Career Education, exploring alternative testing procedures, and the development of information centers which would provide students with a common source for a variety of career information. For reporting data purposes, data related to attainment of this goal have been divided into four sections. These are: (1) student perceptions of counseling needs; (2) a description of career counseling activities within the district; (3) activities related to the development of career information centers; and (4) testing programs employed by the Great Falls Public Schools. These data are reported in succeeding components of this section of the report.

Goal 3: Placement. In many respects, this goal has been misnamed and as a consequence, connotes a rather restrictive focus for operation. However, the goal statement itself and project activities related to this goal both describe the comprehensive and very critical component of the total Career Education effort. In all likelihood, it is through the placement activities of the project that effective integration of the range of desired community resources with school programs will ultimately occur.

Generally, project activities during this past year in relation to placement have focused upon four classes of activity. These have been: (1) identification of community resources; (2) work experience; (3) continuing education; and (4) establishment of an employment and/or placement service for students. Each of these different foci of project activity will be discussed in the succeeding section of this report.

Goal 4: Project Management. It has been difficult, in determining how to report this evaluation, to differentiate between the concepts of management, development, and accountability. Because all three of these are pervasive elements within the project context, the differentiation has been quite arbitrary. Basically, determination of which data and which issues to report in each of these categories has been based primarily on ease of reporting and in an attempt to facilitate the readability of this report.

Management, in a general sense, is defined as the allocation of resources to achieve predetermined goals. For this project, management is of special concern because of the very nature of the project. First, the concept of Career Education requires adoption of a totally new curriculum philosophy by the school district. The second requirement for the project is to develop a model which will generalize to other school settings. One or the other of these two requirements would be difficult. In combination, they become almost impossible. It is only through effective management that both outcomes can possibly be obtained.

Generally, the three sections of this report which could well have been included within the management function include: (1) management; (2) development; and (3) project accountability. However, there appeared to be certain unique qualities of the project which could best be reported under management, those which chould best be reported as development activities, and finally those which could best be reported as accountability to the project sponsor. Therefore, included in this section of the report, devoted to management, are only those activities which have been oriented toward integration of the Career Education concept into the schools, development of a Career Education model, and provision of necessary resources for the project to function.

Baselines for Future Project Operations. In a previous section of this report, the purpose and nature of baselines for project operations were discussed. As noted there, four types of data have been employed to establish baselines. These are: (1) standardized tests; (2) locally developed tests; (3) special studies; and (4) record data.

In some respects, it is unfortunate that reporting requirements for the project employ the necessity for establishing baselines at this early date in the project's history. This condition is unfortunate because of the ambiguous nature of desired student outcomes. However, since the project must exist within the real world, an attempt has been made to establish those baselines which appear to have the greatest potential for future use by the project and which would be most meaningful to project sponsors.

As explained earlier, many of the baselines established for this year of project operations were established on a conditional basis. This was necessitated by the precarious nature of baselines at this early stage in the project's history. In many respects, reporting baseline data in this report will have little value to either the project or the project sponsor. The main purposes for including baseline data in this report are to describe project efforts in this activity and to record those data which might be used for assessing effects of project operations during succeeding years.

Developmental Activities. Several elements of information reported in this evaluation have indicated that effective integration of Career Education would probably not occur until such time as school staff had accepted the philosophy of the concept and were familiar with Career Education strategy which they could readily incorporate into their ongoing programs. Consequently, because of the importance of staff development activities, the majority of this section of the evaluation has been devoted to the staff development activities conducted by the project. Included are in-service training activities, role definition, trends in Career Education, developing an inventory of community resources, and finally, material resources identification and acquisition.

In-Service Training. Importance of an effective in-service training program has been emphasized in several sections of this report. Perhaps the most significant information, relating to this aspect of the Career Education project, was that provided by the Career Education specialists. In virtually every question to which they formulated a response, they tended to emphasize the importance of developing staff attitudes and knowledge about the concept of Career Education.

The primary project activity related to in-service training was the conduct of the formal course. It is of interest to note that barely 10% of the instructional staff of the entire school district were enrolled in this particular course. These students were granted five credit hours through a local university for completion of the course. Published instructional objectives for the in-service program conducted by the project were to insure that each student will:

1. become aware of the concept of Career Education;
2. demonstrate his or her understanding of Career Education;
3. become acquainted with Career Education programs in Montana;
4. develop a philosophy of Career Education and relate this philosophy to the class; and
5. be able to list and explain the component parts of a Career Education program, i.e., awareness, exploration, application and specialization.

Instructional strategies employed in the course generally focused upon the use of a variety of consultants, extensive reading, and the completion of one or more group projects. The course outline for this in-service training program is shown in Table 1.

Table 1
Course Outline for the In-Service Program

I. What is career education?
   a. Definitions
   b. Role in total education programs
   c. Purposes and objectives
   d. Career education models

II. Career education at the elementary level. (awareness)
   a. Purposes and objectives
   b. Cluster identification and exposure
   c. Programs and activities
   d. Role of education personnel
   e. Role of community
   f. Relationship to other components

III. Career education at the junior high school. (orientation)
   a. Purposes and objectives
   b. Cluster identification and orientation
   c. Programs and activities
   d. Role of education personnel
   e. Role of community
   f. Relationship to other components

IV. Career education at the senior high school. (application)
   a. Purposes and objectives
   b. Cluster experiences
   c. College bound/non-college bound considerations
   d. Programs and activities
   e. Role of education personnel
   f. Role of community
   g. Relationship to other components

V. Career education at the post-secondary level. (specialization)
   a. Purposes and objectives
   b. Occupation/profession specialization
   c. Programs and activities
   d. Vo-tech, community college and university considerations
   e. Role of education personnel
   f. Role of community
   g. Relationship to other component parts

VI. Trends and Implications
   a. Directions in career education
   b. Opportunities in career education
   c. Implications for new and experienced educators

VII. Summary and conclusions
   a. Need for a system approach in career education
   b. Need for improved articulation
   c. Need for improved communication

Role Definition. Because of the ambiguity which typically surrounds the concept of Career Education, it was felt this evaluation could provide valuable insights for project staff regarding perceived roles by several different populations. Consequently, teachers, counselors, administrators, the Advisory Board, and parents were all asked to define what they perceived as their role in a Career Education curriculum and how this may be different from their role in a non-Career Education program.

Teacher perceptions of the differences between Career Education and what they had traditionally done are summarized in Figure 13. As shown there, teachers apparently believed that a Career Education program will require more direct work experience and that students will develop a greater awareness of career opportunities with this new organizational focus. Summarized in Figure 14 are teacher perceptions of their roles in the process of integrating Career Education. As shown there, they perceived their role to be one of curriculum development, the development of instructional strategies, and the development of strategies necessary to integrate the concept into the curriculum.

Counselors were asked directly what they perceived as their role in relation to dropout problems, support of teachers, curriculum design, student work and/or study placement, and the dissemination of Career Education information. There was virtual consensus among all of the counselors that they had an important role to play in each of these areas with one exception--student work and/or placement. Counselors lack of concern for and commitment to, student placement and work experiences, was apparent in other dimensions of this evaluation. It strongly suggests the project will need to establish a student placement service if this aspect of Career Education is to become fully developed.

Counselors were also asked if they were aware of a defined role for them in the project. Approximately 64% of them indicated they were aware of a role and among those who indicated they were not aware of a role, all of them specified they would prefer to have a defined function within the project.

Approximately one-half of the counselors who participated in this evaluation indicated they had responsibilities in the area of work experience, job placement, and academic placement. Less than one-third of the respondents indicated they had some responsibilities in the area of the cooperative work program. In some respects, this information is contradictory to that which has been presented in other sections of the report.

It does indicate a need on the part of project staff to clarify the counselors' role as Career Education programs become more articulate and more fully integrated into the curriculum. Information which may be useful in this respect was presented earlier as baseline information--this was the distribution of counselors' time.

Administrators were asked what they perceived as their role in the development and implementation of Career Education in each of six different areas. Their response to this question are presented below:

1. increased student awareness of career options
   - -help teachers plan programs
   - -help teachers locate materials and other necessary resources
   - -provide administrative support for field trips and other types of Career Education activities

2. reduction in school dropouts
   - -provide information and counseling services for teachers and students
   - -develop instructional programs which are more individualized in nature

3. increased vocational guidance services
   - -serve as a resource person
   - -this is not my role
   - -make students more fully aware of services provided

4. student opportunity to make career choices
   - -this is not our responsibility (elementary level)
   - -provide opportunities for students to explore a variety of careers

5. increased relevance in the curriculum
   - -promote an atmosphere which fosters experimentation through such activities as faculty in-service training
   - -curriculum revision and/or construction
   - -through teacher awareness

6. involvement of school staff in Career Education
   - -heighten teacher motivation to integrate the concept
   - -dissemination of information about Career Education
   - -provide guidance and in-service suggestions
   - -coordination of all activities related to development of the concept

Advisory Board members were asked what they perceived as their role in relation to three specific classes of activity. The large majority of respondents felt their primary role was two-fold: to provide information and to serve as a consultant to the project. They specifically indicated their role did not include making decisions. Over 60% of the Board members indicated they were satisfied with their present role. Some concern was expressed about the usefulness of the Advisory Board by several of its' members, which is not an uncommon situation. Typically, such concerns are expressed by those Board members who have decision-making responsibilities in their vocation and consequently are uncomfortable in an advisory capacity. If these attitudes are allowed to continue or develop, the usefulness of the entire Board can be jeopardized.

Parents who participated in this evaluation were asked to describe their perceptions of the desired role for both themselves and the community in a fully operational Career Education program.

It is interesting to again note the lack of importance attached to providing students with work experience within the community. This aspect, as one function of the project placement program, should be subjected to more careful study.

Parent perceptions of their role are congruent with what could be expected in a functional Career Education program. However, it does appear that they will need to be kept fully informed about project developments and also be supplied with that information which will enable them to satisfy responsibilities to their own children. Possibly this could become one dimension of the Public Information program planned by the project.

Accountability to the Project Sponsor. Four general issues were perceived as being of special significance to the project sponsor and consequently have been addressed in a separate section of this evaluation. These are: (1) project awareness by its' constituency; (2) effects within the District; (3) project operations; and (4) model generalizability. Data related to each of these issues are reported in succeeding sections of this report.

Project Awareness. Several sources and types of data were employed to determine the degree of constituency awareness of the project. First, district administrators were asked what they perceived as the major purposes for the project (all were aware of the project because of district administrative procedures). Their responses included the following kinds of comments:

-make students aware of careers
-provide opportunity for student to explore careers
-provide students with wider knowledge about the world of work
-provide resources in support of a career exploration program
-develop student self-understanding
-assist students in making career decisions
-create an interest in people and their occupations

One of the most poignant comments made in the total evaluation efforts was made by one administrator in response to this questionnaire item. His comment:

-not to teach different things, but to teach things differently

This individual has captured much of the purpose for Career Education in one sentence.

Generally, administrator perceptions of project purposes are congruent with the goals of the project which suggests they were very much aware of the project. Their comments are perhaps best summarized as: (1) development of student self-awareness; (2) development of student career awareness; (3) provide Career Education resources; and (4) integrate the concept of Career Education.

School district counselors and Great Falls labor representatives, as one dimension of a separate question series, were asked if they were aware of the project. All of the counselors indicated they were aware of the project and responses to additional questions indicated they understood the purposes for the project.

However, only 50% of the labor representatives questioned said they were aware of the project. Those who are aware of the project also apparently understand the purposes of the project. For example, they described purposes, such as familiarizing students with a career, support a work placement program, etc.

The staff site-visit program has apparently contributed heavily to development of project awareness throughout the district. Information about this project activity is included as Appendix J to this report.

Another project activity which has undoubtedly contributed to development of project awareness was publication of various brochures and a project newsletter. Both of these documents received wide distribution throughout the district.

Finally, project staff carried on an intensive program specifically oriented to development of instructional staff understanding of Career Education. A mediated presentation was produced especially for this effort and programs were presented in the majority of schools within the district.

Effects Within the District. Two classes of project "effects" were assessed for purposes of this evaluation. They were labeled "general" effects and those which were associated with installation of a Career Education model.

It was assumed that administrators, because of their role within the schools, could best judge the degree to which desired project outcomes were being attained. Their rating of project progress are summarized in Table 30. As shown, the project was rated generally low in four areas: (1) reduction in dropouts; (2) vocational guidance; (3) student career choices; and (4) educational and job placement. Since these four outcomes could only be attained by a fully operational program, the lack of progress at this time is not considered significant. As noted earlier in this report, these four areas are receiving concentrated attention from project staff.

One dimension of general effects which was considered important for this evaluation was that of project management. Again, school district administrators were asked to rate the project this time on the effectiveness and efficiency of project management. Their ratings are summarized in Table 32. These ratings, which were made by persons who are familiar with management principles, generally suggest the project has been well managed. If the contingency relationship between management and project effects holds true, then it can be concluded the project probably had as much impact as possible during the first year of operations.

Finally, as a means to identify district administrators perceptions of the project, and consequently the degree of support which chould be expected from them, they were asked to rate the project on selected dimensions such as usefulness, importance, etc. Their ratings are summarized in Table 33. As shown, this group rated the project generally high, which suggests they have accepted the concept and will probably be supportive of future project efforts.

Installation of Career Education Concepts. This aspect of project effects was assessed by student descriptions of observable Career Education activities currently present in the curriculum and administrators' ratings of project effects.

Over 45% of one student sample reported they had experienced what they would consider "Career Education" in their courses this past year. Courses named as having provided a "career education experience" included the following:

English
Industrial Arts
Science
Math
Algebra
Health
Art
Home Economics
Physical Education

This listing of courses is interesting as it includes several which, in a traditional program, would not be considered career oriented. The listing suggests that students are becoming more aware of career options and the training requirements for careers. It also suggests that teachers have made a more concerted effort to emphasize the congruence between course content and potential career fields. All of these factors should ultimately contribute to ensuring curricular relevance.

Project Operations. Several elements of record data have been employed to describe significant project operations. Of these data, perhaps the "Dropout Study," included in Appendix L, is the most significant. This study was conducted very systematically and explores in-depth the causes for students leaving school prior to graduation. This information should be especially useful to both the project and the district, generally, in future activities in that it establishes a useful data base for program design.

A second element of record data which was perceived as significant was the number of Great Falls employers with whom the project had effected some form of interaction. The number exceeds 300. A record of these interactions has been established which includes all pertinent information for the project to integrate these employers into the placement program.

F. Conclusions and Recommendations

Conclusions

General. The project has experienced a number of difficult situations during this first year of operations. Perhaps the most significant of these was resignation of the individual who wrote the original proposal. This factor, coupled with the nature of the proposal, necessitated the development of an entirely new set of operational procedures. For many projects, such an initial hurdle would have been fatal. However, the rare degree of commitment and creative ability manifest within the project staff enabled them to successfully achieve the desired level of outcome in each goal area.

The unity of purpose among project staff and each person's high level of achievement motivation were not specifically addressed by this evaluation. This was unfortunate, for this factor has probably been the most significant in ensuring the project's successful completion of this first year.

Developing a fuller understanding of the broad concept of Career Education among district staff appears to have been the most important outcome achieved in the initial year. Conversely, community involvement has been the area in which the least success was observed. This lack of community involvement should not be considered a serious shortcoming as this first year was devoted largely to defining Career Education for the Great Falls schools. It may prove to have been politically wise to not involve the community to a great degree until such time as a more definitive program and a more definitive role for the community has been established. This factor can, and should, be assessed in succeeding years of the project.

Goal 1: Curriculum Development. Data presented earlier in this report generally have shown that definition of a curricular scope and sequence, for integration of Career Education, has progressed very well. By the end of this next year, given the same amount of development effort, curricular revision processes should be nearly completed.

The most significant project outcome, in relation to this goal, has been the extensive resource base developed for Career Education. Historically, the lack of necessary resources has been the most serious constraint to the installation of an innovation. This potential problem area has been largely eliminated by the project.

Goal 2: Counseling. Generally, data presented have shown that counselors manifest a useful attitude toward Career Education and are desirous of doing more career counseling. Significant progress was made toward establishment of Career Information Centers, which should greatly enhance counselors' abilities to develop students' career decision-making capabilities. It is noteworthy that project staff have been especially influential in the establishment of these centers.

Several standardized tests were administered on an experimental basis this past year. Analysis of data from these testing procedures should facilitate the establishment of an elementary career counseling program which, in turn, should have significant impact upon instructional strategies employed by teachers. The synergism which exists in this area should be carefully observed throughout the second year of operations.

Goal 3: Placement. The potential of the placement program planned, and currently becoming operational, is very exciting. Of special significance is the planned coordination of effort among a diverse range of agencies. However, at this time, there is some confusion among representatives from these various agencies as to their role within the total effort, this being especially noticeable in comments made by Labor representatives. Defined roles for each agency participating in the placement program should be established soon.

There also appears to be a need to expand the work experience aspects of the program, both conceptually and operationally, beginning with the establishment of specific objectives for each element of the total program. This expansion effort should be completed early during the second year of operations. In this same regard, there is a need to establish procedures for effecting integration of the work experience concept throughout the curriculum. For example, the work experience program is limited, at this time, to Office Education, Distributive Education and Industrial Cooperative Training.

Goal 4: Project Management. All of the data presented in this report are supportive of the project management effort. Considering the nature and significance of problems confronted by the project, this is probably the area in which the greatest achievements were obtained. This factor is especially significant in a project as complex as this one, for it establishes an operational base for use in succeeding years.

One dimension of the total management effort was noticeably weak, the use of Career Education specialists to facilitate generalizability of the total model. Those specialists who were identified for participation in this evaluation made a very weak contribution.

Recommendations

Based upon the data presented earlier, the following recommendations seem appropriate:

1. A strategy should be designed for employing the Advisory Board as a means to effect wider community involvement;
2. A closer liaison should be established with labor groups as there appears to be a number of potential problems in this area;
3. Continuation and expansion of the in-service training program is clearly needed;
4. A strong, systematic, information dissemination program would probably be of benefit to the project;
5. Specific model development foci should be established for this next year to avoid inefficient expenditure of staff resources;
6. Model development, during this next year, should focus upon specification of model characteristics and testing of those characteristics. This will probably require the design and conduct of comparative studies;
7. Emphasis in the next evaluation should begin to change from a process to a product orientation.

IV. PROJECT OUTCOMES

A. Concept Definition

Evaluation data indicates that participants in the graduate in-service class have a more comprehensive view of career education and a deeper understanding of project goals than do others responding to the questionnaires. There is an increasing interest among teachers, as they become aware that development of career education activities is consistent with their objectives and instructional strategies. This implies an emerging definition based on experience and a need to broaden the experiential base for as many publics as possible.

B. Program Development

Elementary Curriculum. Teachers have developed instructional units designed to increase self-awareness and career awareness. These units are not adjuncts to the present curriculum but integrate career education concepts with basic content areas. Complete curriculum review and revision was begun at kindergarten level and will form the basis for continuous action throughout the elementary grades.

Secondary Curriculum. Teachers have developed instructional units related to their respective disciplines. Junior high schools have initiated mini--or avo--courses, as well as brief occupational awareness units. Career education is a major focus in a Consumer Economics course currently in the developmental stage. The Distributive Education program was expanded, becoming the first step in a cluster curriculum. Recommendations were presented to the district for a similar change in Office Education. Initiation of the Industrial Arts Curriculum Project (McKnight Publishing Company) at ninth grade should lead to a cluster in Construction. Over 800 secondary students will participate in the U.S.O.E. sponsored Satellite Technology Demonstration.

The committee developed a checklist for teachers to assess career education classroom activities and materials during the 1974-75 school year. This group also prepared recommendations for the suggested level of inclusion of career education concepts in the secondary curriculum.

Counseling. Intensive planning for facilities and screening of materials were emphasized during the first year in order to expand career guidance services in the secondary schools. This was a cooperative effort and includes counselors, librarians and instructional staff. Two objectives will be easy access to materials and increased counselor contact.

Project staff, counselors, Explorer personnel (B.S.A.), and computer experts developed a Career Interest Survey which provides printouts to facilitate group career counseling and to plan curriculum based on student needs and interests. The survey form and computer program were shared with major school districts statewide.

Placement and Work Experience. Efforts during the first year were directed toward bringing together those people and agencies whose chief function is job placement and developing communication channels and operational policies such that both full and part-time employment facilities could be installed in the secondary schools. Recommendations for a Work Experience program have been presented to the Board of Trustees, and, if approved, will be implemented during 1974-75.

V. RECOMMENDATIONS FOR FUTURE ACTION

Based on first year results, the in-service program should continue with the following modifications:

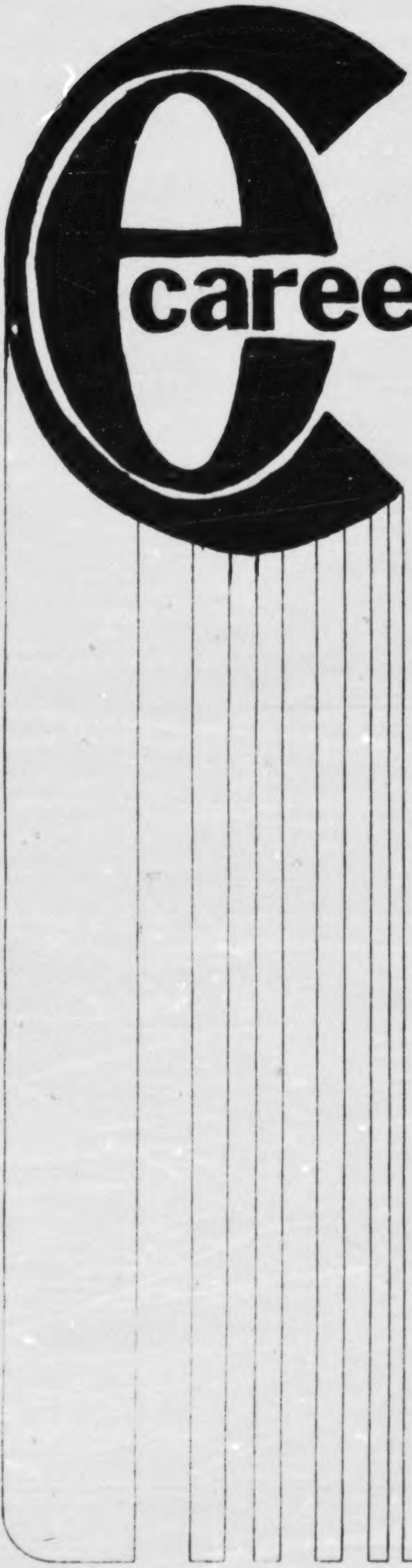
1. Develop more programs for administrators
2. Concentrate on those teachers most likely to change
3. Involve participants in the planning
4. Plan support and follow-up activities for those presently developing projects
5. Plan more intensively for a shorter duration

Efforts should be made to present the program to more parent and business groups, and informative brochures should be prepared for diverse publics.

In curriculum development, project staff should pursue expansion of existing programs into clusters. This would involve Home Economics, Environmental Education, and Physical Education departments during the next year of operations. Further consideration should be given to Agri-Business and Health, probably in cooperative programs with the State Department of Education, because of community interest. There is enthusiasm among the instructional staff to explore cluster development in Communications and Media, so time and resources should be allocated. Alternatives for disinterested students should remain a priority.

Communication with the Northwest Regional Education Laboratory will continue relative to their Community Experiences in Career Education $(CE)_2$ program. Selection of Great Falls as a field test site would enhance secondary aspects of the project. As the State Department of Education implements legislation pertaining to learning disabilities within the context of Special Education, the project will be able to address itself to students with special needs.

Management efforts must be directed toward finding those successful strategies employed by other projects which lead to adoption of career education objectives and implementation procedures by instructional staff and administrative authorities. Verbal and/or partial financial support do not constitute adequate commitment to the broad goals of Career Education.



career education

An Exemplary Career Education Program
in the Great Falls Public Schools

Great Falls Public Schools
1100 Fourth Street South
Great Falls, Montana 59401

Second Year Interim Report

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SUMMARY OF THE REPORT

A. Time Period Covered

July 1, 1974 to June 30, 1975

B. Goals and Results

During the preceding year, the majority of project energies were focused upon systematic delineation of critical components for a career education curriculum. During this year, concurrent activities were conducted to both develop identified components and continue the identification/definition process. These latter activities focused upon the counseling function and components for curricular integration.

A change was also made in the outcome focus for the project. Where it had been upon four developmental areas--curriculum, counseling, placement, and management--it now shifted to prescribed student outcome areas. This change was precisely as planned during the first year of the project, when it was noted that student outcomes could not be achieved in the absence of operational career education components. Categories of outcomes employed during this year were (1) student, (2) placement, (3) management, and (4) career education support.

The typical problems encountered in treatment delineation within a public school setting were manifest throughout the program. Given these classical shortcomings, several significant findings were observed. Achievements of the project in each major outcome area are summarized below:

Student Outcomes: Treatments which had a significant effect in each outcome area addressed are:

A. Self-Awareness (Grades 3, 6, 9)

B. Awareness and Knowledge of Work (Grades 3, 6, 9, 12)

C. Career Decision-Making Skill (Grades 9, 19, 11, 12)

Placement: Three project supported activities were expanded considerably. These are the work experience program, cooperative work experience program, and the Community Resource Center. The number of stations available and used for cooperative work and work experience was expanded significantly from the preceding year.

A survey was also conducted to determine what success students who left school prior to graduation were experiencing in obtaining work. This same survey also attempted to determine what school programs students perceived as most useful in obtaining "satisfying" work.

The inventory and use of community resources was greatly expanded through the coordinating activities of the Community Resource Center. Perhaps the most important outcome was the increased use of community resources in the lower grade levels.

This latter condition is a clear manifestation of the interaction between program components which had a confounding effect upon attempts to measure student outcomes.

Management: Management of a complex, multi-facted project is a difficult task. It requires a unique combination of close supervision and program flexibility to capture and maximize benefits from unique project effects.

Major management concerns during this past year have focused upon financial accountability, developmental direction for the project, integration of operational components, and facilitation of program continuation.

Each of these tasks has been addressed and successfully incorporated into overall program operations. Especially noteworthy has been the continued development of esprit among the staff.

During this next year, the major management concern addressed will be institutionalization of fully developed program components.

Career Education Support: The project staff participated in a broad range of activities, each of which contributed to the overall effect of the project. Generally, these types of activities do not possess a terminal point, i.e., they will be continually revised, expanded, or adapted to changing conditions within the district. Also included are those types of activities designed to provide needed information for continued development.

Specific activities included:

A. Installation and testing of Career Information Centers;

B. Counselor involvement in career-related programs;

C. Staff development;

D. Model description;

E. Assessment of criterion instrumentation;

F. Assessment of treatment instrumentation;

G. Study of strategies to facilitate student internalization of career concepts; and

H. Study of student career patterns.

C. Conclusions

Generally, many significant gains were made in achievement of project goals. As expected, some aspects of the project made more progress than others.

Given the data bases which currently exist, it seems reasonably safe to predict that goals for the project specified at the outset will be fully realized by the end of third year operations.

A. DESCRIPTION OF THE PROJECT

See Final Report, pp. 4-12

B. PROJECT PROCEDURES

1. Curriculum Development

At the elementary level efforts were continued to determine those logical places within the existing curriculum for infusion of career education concepts. The emphasis was placed on the basal reading adoption and some refinement of units within the social science program. Evaluation of supplementary print and non-print materials was also continued throughout the year. The new kindergarten curriculum guide, with its emphasis on self-awareness, was piloted and subsequently revised for final publication.

At the secondary level interested teachers were encouraged and assisted by project staff to incorporate elements of career education into their instructional programs. Activities focused on self-awareness, decision-making, values clarification, and career exploration. Late in the year all secondary teachers were surveyed to determine the degree to which career education concepts are presently emphasized. This will form the basis for continued development during 1975-76. A limited number of students participated in the Region VIII Satellite Technology Demonstration. Although this will not be available in the near future, the evaluation data should be useful in developing program format, using similar media and materials.

Development of the Community Resource Center proved valuable at both elementary and secondary levels. Teacher evaluation was overwhelmingly positive.

2. Counseling

New approaches to test interpretation, and the utilization of special staff in the Career Information Center, were two efforts to improve career guidance services in the senior high school. A change in scheduling procedures also contributed to better use of counselor time.

3. Placement and Work Experience

Project staff worked with a Citizen Involvement Committee to plan a centralized placement service for young people. The major objective is to consolidate the efforts of the various agencies serving youth.

Cooperative work experience programs have been expanded with the addition of Agri-business to the vocational curriculum. Plans were developed with high school administrators for an extended day program which would facilitate work experiences outside the cooperative programs, but would include development of job seeking/job maintaining skills. This plan has been submitted to the Superintendent for consideration by the Board of Trustees.

4. Management Activities

Routine project supervision was extended to include developing and conducting graduate inservice classes, editing and publishing curriculum units developed by participating teachers, organizing a cataloging system for professional career education materials, and implementing an internal accounting system.

A great deal of time was spent structuring treatment groups to ensure project compliance with established evaluation guidelines.

C. EVALUATION OF THE PROJECT

1. Introduction

Rationale: From the outset, evaluation of the project has been conceptionalized as a long-term effort, with the first and second years of project operations being primarily information-based studies. During the third year, when the project will be seeking to establish generalizability of the developed model, the evaluation will be predicated largely upon conclusion-oriented studies. However, political realities require decision information of various types, at different levels, throughout a project's history. Therefore, some evaluation activities reported employed traditional design and analysis models, e.g., prepost testing procedures on specified dimensions; establishment of base lines for purposes of assessing change; etc. This rationale is consistent with the conceptual structure of the project--Definition, Design, Development, and Installation.

Evaluation Guidelines: In an effort to systematically derive a useful definition for career education, the United States Office of Education commissioned Development Associates, Inc. to conduct a review of available literature, funded projects, related legislation and each of the different theories which appeared to contribute in some way to the concept of career education. The primary intent of this effort was to specify what objectives should be associated with the concept. Development Associates used as their base theoretical constructs which emanated from the work of both industrial psychologists and educational theorists. Also considered were several recent attempts to operationally define career education, such as those manifest in experimental programs funded to implement career education in public school settings.

This effort resulted in a list of nine desired student outcomes. These are:

1. Students will demonstrate increased self-awareness;
2. Students will demonstrate increased competency in basic academic and vocational skills;
3. Students will demonstrate increased awareness of work values and possess a desire to engage in paid or unpaid work;
4. Students will demonstrate increased awareness of and knowledge about work;
5. Students will demonstrate increased competency in career decision-making skills;

6. Students will demonstrate good work habits;
7. Students will demonstrate work-seeking and work-getting skills;
8. Students who are leaving the formal education system will be successful in being placed in a paid occupation, in further education, or in unpaid work that is consistent with their career plans; and
9. Students will be aware of means available for continued education once they have left the formal educational system.

A second product emergent from Development Associates' work was a set of evaluation guidelines. The model which they developed was presented as a part of the management process for any career education activity. It was conceptualized as beginning with the development of a plan to reach certain goals or obtain certain results. It was further predicated upon the belief that evaluative data was needed at both the local and national levels. Primary concern at the local level would be to provide those data which would facilitate attainment of objectives for a specified project. Data to be provided for use at the national level would focus upon those kinds of issues necessary in the formulation of policy for continued funding and further definition of the concept of career education.

The model proposed by Development Associates includes thirteen steps which are implemented throughout a continuing evaluation process. These steps are:

1. Prepare the program overview;
2. Complete the Outcome Question/Treatment Group Matrix;
3. Formulate evaluation questions;
4. Specify the design;
5. Specify data sources;
6. Select or develop instruments;
7. Prepare a sampling plan;
8. Prepare a data analysis plan;
9. Prepare a data collection plan;
10. Finalize the design and prepare a reporting plan;
11. Implement the data collection plan;
12. Analyze data; and
13. Report findings.

These thirteen steps were generally followed in the design and conduct of this evaluation to insure that data derived was of maximum usefulness at the national level. Steps 1 and 2 are equivalent to Phase I (Pre-Design) of this evluation; steps 3 through 10 are equivalent to Phase II (Design); steps 11 and 12 are equivalent to Phase III (Design Implementation); and step 13 is equivalent to Phase IV (Reporting).

Purpose: In a developmental program, such as the Great Falls Exemplary Program in Career Education, the primary purpose for an evaluation is to supply timely, credible, and manageable information that will support both project staff and the project sponsor in meeting four basic responsibilities. These are:

1. Establishment of meaningful and valid criteria for project outcomes;
2. Effective and prudent use of project resources to attain project goals;
3. Objective and useful dissemination of information to the educational community and other concerned publics; and
4. Accountability to the sponsoring agency.

The evaluation plan implemented, in addition to satisfying the basic responsibilities listed above, was also designed to:

1. Determine the extent to which the objectives of the project were accomplished,
2. Determine what factors either enabled or precluded the accomplishment of specified objectives; and
3. Promote the inclusion of successful components of the project into vocational education programs supported with funds other than those from the grant.

Procedures: Generally, evaluation of the project was accomplished in five phases. These are (1) Problem Definition, (2) Design, (3) Implementation, (4) Reporting, and (5) Management.

In an attempt to ensure that information needs of the project sponsor were adequately satisfied, evaluation guidelines established by the sponsor were systematically followed. As noted earlier, the numerous steps outlined in the Guidelines were divided into the five phases listed above. The complete evaluation design describes procedures employed.

2. Data Generation

Tests: In developing the national evaluation guidelines for career education programs, Development Associates systematically reviewed a number of test instruments for which sufficient research data were available and where an attempt had been made to establish norms. These tests were organized in relation to student outcomes and were recommended for use by all projects.

In the majority of cases, recommended tests were employed as criteria for selected treatments. However, in some instances, the test also served as a treatment. For example, the Barclay Classroom Climate Inventory was employed by teachers as a specific treatment with the Self-Observation Scales test used as the criterion.

Recommended tests employed in this evaluation are listed in Table 1. A complete description of the test employment strategy is summarized in Table 2.

Questionnaires: Eleven questionnaires were employed in the conduct of this evaluation. Objectives addressed are summarized in Table 3. Specific project and/or student outcome areas addressed in these questionnaires may be determined by examining Table of the Evaluation Design. On that table, outcome areas, project objectives, and evaluation objectives are cross-referenced.

Record Data: In a typical evaluation, a great deal of useful information is routinely generated during project operations. A summary of these types of data, called "Record Data", which contributed to this evaluation, is shown in Table 4.

A more complete description of data generation and related procedures employed for this evaluation may be seen in the evaluation design (Appendix A). Much of the information included there has been purposely omitted from this report to simplify the report format.

TABLE 1

TESTS EMPLOYED

Test	Project Objective	Outcome Area	Grade Level
Self-Observation Scale	1	I	3-6
Career Education Questionnaire	2	IV	3
Career Awareness Inventory	2	IV	6
Career Maturity Inventory	2	IV	9
Career Development Inventory	2	IV	9
Assessment of Career Development	2	IV	12
Career Development Inventory	2	IV	9
Career Maturity Inventory	3	V	10
Career Development Inventory	3	V	12
Deferential Aptitude Test with Career Planning Program	1	I	9
Barclay Classroom Climate Inventory	1	NA	3-6
Ohio Vocational Interest Scale	2	NA	9
General Aptitude Test Battery/Interest Check List	3	NA	11-12

TABLE 2

TEST EMPLOYMENT STRATEGY

Eval Obj	Population			Design	Data Requirements	
	Grade	School	#		Treatment	Criterion
1	4	Franklin	30	pre-post	BCCI	SOS
	6	Franklin	30	pre-post	BCCI	SOS abilities
	9	North/Paris	30	pre-post	DAT/CPP	self-report abilities
	9	North/Paris	30	post only	None	self-report
2	3	Whittier Collins Lewis & Clark Morningside	132 total	pre-post & comparison	Teacher Training	CEQ
	6	Skyline Lincoln Meadowlark	75 total	pre-post	Field trips & resource persons	CAI
	10	GFHS Gr 10	40	pre-post	Use of CIC, OVIS & ATS-VI	CMI
	9	East Gr 9	30	pre-post	ATS-VI	CMI
	12	GFHS	16	pre-post & comparison	CIC use/nonuse	ACD
3	10	GFHS	50	pre-post	OVIS & CEEB/D&O	CMI
		GFHS	25	pre-post	OVIS only	CMI
	11-12	CMR	10	pre-post	GATB/ICL/CEEB	CDI
	12	CMR	30	pre only	CEEB/D&O	CDI

TABLE 2 (continued)

Eval Obj	Population			Design	Data Requirements	
	Grade	School	#		Treatment	Criterion
4	11-14	NA	15	post only	NA	Quest w/exp
5	10-12	NA	6	post only	NA	Quest report
6	NA	NA	NA	NA	NA	budget
7	10-14	NA	NA	NA	Established operational placement svc	number students placed

TABLE 3

QUESTIONNAIRES EMPLOYED FOR THE EVALUATION

Respondent	Evaluation Objective	Purpose/Focus
Coop Work Coordinators	5	Description of procedures employed to identify cooperative work stations
Student drop outs	4	Congruence between desired and actual placement in a job. Exit questionnaires
Director, Vo-Ed	5	Nature and amount of liasion with career education for: (a) course development, (b) program articulation, and (c) program development
CIC Director	8	Inventory of CIC materials, Procedures for student use of CIC
Gr 11 & 12 students	8	Personal perception of value of CIC in career decision-making
Counselors	8	Frequency of referral of students to CIC
Students who use CIC	8	Perceptions of CIC value in career decision-making
Part D Project Directors	13	Definition and description of transportability as employed by their projects
Montana Superintendents	13	Description of information needed to adopt Great Falls components developed under the auspices of this project
Teachers who have taken the CE course	15	Frequency of use of activities labeled as career education related
Teachers who have used selected tests	17	Ratings of selected tests for use in CE programs

TABLE 4

RECORD DATA WHICH CONTRIBUTED TO THE EVALUATION

Objective	Data Element Number	Description
1	1	Number of hours spent in use of (a) BCCI and (b) DUSO I & II
1	2	Number of hours devoted to interpretation of OVIS in (a) groups, and (b) individual sessions
1	3	Number of students in each group names in (2) above
1	4	Number of hours of joint planning for OVIS interpretation by teachers and counselors
1	5	Description of follow-up activities prescribed from OVIS interpretation by (a) teachers, and (b) counselors
1	6	Hours of classroom use of DUSO Kits
1	7	Number of students in classes where DUSO Kits were used
1	8	ITBS scores for 30 students each, in grades 4, 8, and 6, whose teachers have completed the Career Education course
1	9	ITBS scores for 30 students each, in grades 4, 8, and 6, whose teachers have not completed the Career Education course
2	10	Number of field trips taken, when, and to where
2	11	Name and occupation of each resource person used
2	12	Number of hours of CIC use for selected sample of students who use GFHS CIC and who also use counseling services
2	13	Class roster and total hours each student spent in use of ATS-6 demonstration broadcasts
3	14	Hours per student spent in use of CEEB materials and OVIS interpretation
3	15	Hours per student spent in use of OVIS scores for group counseling

3. Report of Data Related to Goal Attainment

Introduction: As noted earlier, this evaluation has attempted to satisfy a diverse range of information needs and requirements; from those required by the Evaluation Guidelines to those of the project for short and long range planning.

The most expedient reporting format appeared to be selected outcome areas described in the Evaluation Guidelines. However, a number of evaluation objectives were not directly related to these and have been reported as "Related Activities".

Self-Awareness: The evaluation design prescribed measurement of changes in student self-awareness in grades three, six, and nine. At each grade level, a prepost design was employed, using a criterion judged appropriate for the treatments employed.

The treatment for grade three was use of the Barclay Classroom Climate Inventory and subsequent interpretation/use of that instrument by the classroom teacher. The criterion employed was student performance on the Self-Observation Scales.

Teachers spent an average of 11.75 hours using the B.C.C.I. Unfortunately, due to administrative problems, it was not possible to use the S.O.S. as a prepost measure. Since only one measure is available, it will be established as a baseline for subsequent years of the project.

Student performance on both the primary and intermediate forms of the S.O.S. is reported in Tables 6 through 8, respectively.

At grade nine the treatment employed was use and interpretation of the Differential Aptitude Test/Career Planning Program. The criterion was a student self-report of abilities. In addition to the treatment group, a second group of students was selected as a comparison. No attempt was made to match these groups due, primarily, to administrative problems inherent in such procedures.

Changes in student self-report of abilities for the treatment group are shown in Table 9. As shown, there were significant changes in student awareness of their Verbal Reasoning Abilities, Numerical Abilities, Arithmetic Reasoning, and Spatial Relations. The comparison group received no treatment.

As shown in Table 10, the treatment group demonstrated a significant increase in perception of ability while the comparison group did not.

Two additional tests were made to assess the adequacy of the criterion. As shown in Table 10, there is a significant correlation between treatment group pretest scores and actual performance on the D.A.T. Additionally, variance was homogenous within the treatment group.

These data, while promising, also suggest that some other factor was operating within the treatment group; for the comparison group could have been expected to perform equally.

Data presented in Table 10 also show a significant difference on the post-test between the treatment and comparison groups. Given the other differences which existed, this was expected.

These data strongly suggest that use of the DAT/CPP was influential in changing students self-awareness on the constructs measured by the D.A.T. However, due to the lack of control manifest in typical classroom studies, it is impossible to establish a causal relationship.

Further study of the DAT/CPP as a strategy to change student levels of self-awareness is warranted by the data.

Awareness of, and knowledge about, Work: Measures of this outcome area were taken in grades three, six, nine, and twelve. In each case a different treatment was employed and, consequently, across grade level comparisons should not be made.

The treatment at grade three was Curriculum Infusion, which was defined in this project as a teacher who had been trained in Career Education. Comparison groups were again employed, using teachers who had not been formally trained in Career Education. The criterion for both groups was the Career Education Questionnaire.

As shown in Table 11, a significant difference existed between pre- and post-test scores for the treatment group. Data presented also shows a significant difference between the treatment and comparison groups on the post-test.

These data support the conclusion that teacher training has a significant influence on development of student awareness of, and knowledge about, work at grade level three.

The treatment at grade six consisted of an ad-hoc use of field trips and resource persons. Representative field trips included (1) Air Force Base, (2) printing plant, (3) banks, (4) geological sites, (5) auto repair shop, (6) state and federal government office, (7) city offices, and (8) retail sales stores. Total number of field trips taken by the three treatment groups was 38.

A variety of resource persons were used by treatment group teachers. They included numerous professions, trades, and government employees. A total of 26 resource persons visited and/or met with treatment group classes throughout the year.

The criterion employed at grade six was the Career Awareness Inventory. It was administered in a pre-post-test design. Data derived from this testing procedure are shown in Table 12. The difference between pre- and post-testing across the groups was significant.

This analysis was across treatment groups rather than pre-post for each group. Consequently, since a directional change was not hypothesized, a two-tailed test was felt to be more appropriate.

While the pre-post test results are significant, some caution should be exercised in drawing conclusions about a causal relationship between treatment and criterion. Additional studies are warranted to determine what variable, or combination of variables, would account for the difference obtained.

Several treatments and two criterion tests were used at grade nine. Treatment administered and the criterion employed for each are outlined below:

- Curriculum Infusion/C.M.I.
- ATS-VI Demonstration/C.M.I.
- ATS-VI Demonstration and Counselor Interpretation/C.M.I.
- Interpretation of O.V.I.S. results/C.M.I.
- Interpretation, by teacher and counselor, of both O.V.I.S. and C.E.E.B. Program/C.M.I.
- Use of Career Information Center/A.C.D.

Curriculum Infusion was again defined as teachers who had completed formal training in career education. As shown in Table 13, this treatment had no significant effect upon students in grade nine.

Results of the ATS-VI Demonstration are shown in Table 14. This treatment did have a significant effect upon ninth grade students. Complete pre-post-test data were not available for grade ten due to administrative problems.

The ATS-VI Demonstration, coupled with counselor interpretation, did have a significant effect upon grade ten students. These data are reported in Table 15.

Data presented in Table 16 suggest that use of O.V.I.S. test results only does not have a significant effect upon student performance. This is further reinforced by the low correlation between the self-appraisal scale on the Career Maturity Inventory and hours of counseling each student received.

Data presented in Table 17 describe the effects of teacher and counselor interpretation of the O.V.I.S. coupled with the C.E.E.B. Decisions and Outcomes Program. As shown, this intense effort had little effect upon student performance. The negative correlation between this strategy and student scores on the self-appraisal scale of the C.M.I. suggest the strategy may have been too intense - students learned too much about themselves and were possibly unable to cope with what was revealed.

Each of the treatment groups described on the previous page were compared with a general sample of students, again using the C.M.I. The results of this comparison are shown in Table 18. These data suggest three conclusions: (1) The C.M.I. is not sufficiently sensitive to detect changes in student awareness and knowledge about work, (2) Students at this grade level are unresponsive to treatments of the type employed, and (3) Studies to identify a better criterion are warranted.

At grade twelve, the treatment employed was the use, by students, of a staffed Career Information Center. The criterion employed was the A.C.D. test. Results of this study are presented in Table 19. As shown, there is no significant difference between the pre-post-test. However, this treatment is very loosely defined and it is difficult to draw any conclusions from these data.

A seperate study of student use of the C.I.C. is reported in a later section of this report. This information was sought in an attempt to define more precisely what contributions a C.I.C. might make to a career education program.

The lack of significance in each of these treatments was, to say the least, perplexing. Consequently, maturity was established as the independent variable for a separate study with the A.C.D. as the criterion. Data from this study are presented in Table 20. As shown, students in grade eleven performed significantly better on this test. These data suggest that some combination of variables was, in fact, providing students with the desired knowledge. Further study of these factors should be completed.

Basic Skills: Only one study, at grades four and six, was conducted for this outcome area. Results of the study are reported in Table 21. The logic of expecting a change in student basic skills as a result of participating in career education activities is very weak. The lack of significant differences was expected.

The problem here appears to be not with the treatment or the criterion, but with the outcome area itself. It appears the major concern is one of student motivation, not basic skills. One could expect student performance on a test of basic skills to change if, over an extended period, he had been highly motivated to learn these skills.

It is suggested the project sponsors reconsider the logic of this outcome area.

Career Decision-Making Competency: Assessment in this area was limited to grades ten, eleven, and twelve. However, a variety of treatments were employed, including use of the C.E.E.B./Decisions and Outcomes Program, interpretation for students of their performance on the General Aptitude Test Battery, and the Interest Check List.

Data from the C.E.E.B./Decisions and Outcomes treatment are reported in Table 22. As shown, there were no significant differences within the various treatment groups on any of the major scales. This same condition (n.s.d.) obtained when treatment groups were compared to a non-treatment group. These data are presented in Table 23.

The lack of definite findings and several other factors suggested additional analysis and continued studies were appropriate. Consequently, baselines have been established for subsequent years. These are shown in Table 24. Shown in Table 25 are correlations obtained between student scores on the C.D.I. and G.P.A. As shown, only one proved to be significant, which suggests the C.D.I. is a poor predictor of G.P.A. The question not answered is what relationship exists between G.P.A. and Career Decision-Making skills. The answer to this, obviously, must come from a long-term study of some type.

Related Activities: Data are reported in this section which describe a broad range of project activities, each of which is related to development of an exemplary model for career education. The order of presentation is congruent with the order of evaluation objectives (see Design, Appendix A).

1. Establish the degree of congruence between actual and desired student work placement: One of the continuing

project concerns has been its effect upon students who leave school, and especially upon student satisfaction in work obtained. This concern is the essence of the requirement outlined in evaluation objective four.

The broad range of possible contributing factors necessitated narrowing the scope of this objective, finally, to addressing only those students who left school prior to completion of a formal program.

A questionnaire was designed for administration to these students. The focus of this instrument was:

a. Reason for leaving school;

b. Job or position sought;

c. Current activities relative to their changing jobs;

d. How their present position was obtained;

e. Respondents' perceptions of necessary qualifications for their present position;

f. The most "satisfying" aspect of their present position; and

g. The least "enjoyable" aspect of their present positon.

The problems in using this student population are obvious - they are scattered across the country and are very difficult to locate. However, ten students who had left school were located and completed the questionnaire.

2. Describe expansion of job preparation opportunities including vocational education and cooperative work experiences in grades eleven through fourteen: There appears to have been a significant increase in the number of training stations employed during this year compared to last year. In 1973-74, coordinators reported an average inventory of 37 training sites. An average of 106.5 sites was reported during 1974-75. However, there may have been some misunderstanding among the coordinators as to what constituted a training site, as reflected in the range of numbers of sites. This statistic was 327. The median number of sites reported in 1974-75 was 57.5.

Several other comparisons with 1973-74 show some important trends. These include:

a. Nearly half (45%) of the coordinators report supervising 41 or more students. During 1973-74, the mean number of students supervised was 24;

b. Only one coordinator reported a formal student training program in 1973-74. Seven coordinators (78%) reported such programs in 1974-75;

c. Several important changes in criteria used to select students for the cooperative work program are shown in Figure 3. For example, completion of prerequisite courses, economic need, and teacher recommendation are not used as frequently. Generally, these could be considered an improved condition; and

d. Coordinators have assumed much more responsibility for final selection of students (60% to 89%).

Coordinators were asked to list what they perceived as the most significant constraints to operation of the cooperative work program. Their responses were:

a. Teaching load;

b. Business economics of the community;

c. Insufficient personal contacts (relates to (a.) above)

d. Poor career counseling for students;

e. Student classroom load;

f. Lack of equipment;

g. Lack of time to devote to coordination; and

h. Employer education.

An important factor relative to expansion of the cooperative work and vocational education programs is the number of teachers who completed the Career Education Training Program conducted by the project. During 1974-75, fourteen completed the program, with three of these from outside the Great Falls School District.

3. Development and use of Career Information Center: Several alternative formats have been employed in establishing C.I.C.'s, with the major difference being in staffing. The following information about the center was provided by the Project Director:

a. All librarians were directed to recategorize material and centrally locate career education materials. Purchase of new material was to be emphasized on all orders. There was more emphasis in the elementary libraries which, heretofore, had not purchased much of this type of material. While self-awareness is seen as an element of career education, it is most often "filed" as guidance material.

b. Two sources were used for basic book and audio-visual selection - Book List and Media and Methods. Selection of materials is generally based upon recommendations of teachers and/or project staff. It is standard procedure to order material on approval for preview.

c. Funding sources for materials come from four major areas:

    1. Regional Library Budget;
    2. Instructional Materials Center Budget;
    3. District Instructional Materials Order Form;
    4. Project Funds.

d. Regular library procedures are used for student use of C.I.C. All material is accessible, but not all types can be taken home because of insufficient equipment for checkout.

e. There exists some rivalry between librarians and counseling staff as to where materials should be housed. This has improved somewhat during the two years of the project. The supervisor feels the graduate classes have helped articulation among all levels. She particularly mentioned the library staff and English teachers working together on a skills unit based on the theme of career education.

Student perceptions of the usefulness of the Career Information Centers at Great Falls High School and Charles M. Russell High School are described in Tables 28 and 29, respectively. The most important information is that students found the Centers useful in making career decision, which is what they are designed to accomplish.

4. Establishment and use of a Community Resource Center: Systematic development of a Community Resource Center was initiated in 1973-74. Procedures employed are reported in the 1973-74 annual report. This center has proven very effective and useful, as shown by data presented in Table 30 and by the increased number of work stations reported by coordinators.

5. Definition of Model Transportability: A number of persons, including other Exemplary Project directors and federal government representatives, were contacted in an attempt to establish a concensual definition for transportability. Unfortunately, response from persons contacted was very poor. Generally, transportability was defined as the ability to use materials and strategies developed in similar situations. Types of materials included were Teacher Resource Units, Learning packages, etc.

   Many of the responses described a rather naive point of view regarding the problems historically associated with generalization of materials and strategies. This concept, and its use in career education, should be examined carefully.

6. Assess the effects of Staff Development Activities: As in most studies conducted in a public school environment, the necessary rigor to establish causal relationships is very difficult to achieve. In this case a decision was made to design the study around figuring of teacher use of strategies addressed in the project sponsored training program.

4. Conclusions and Recommendations

Introduction: The need for a document such as the evaluation guidelines was clear. However, the guidelines produced were sorely inadequate as guidelines for evaluation in public school settings. Perhaps the most difficult problem was in attempting to achieve the degree of precision necessary in treatments to satisfy the intent of the guidelines. Unfortunately, the guideline document only recognized this problem - it offered no useful strategies for overcoming the problem.

The credentials of the guideline authors are impeccable. However, the guidelines themselves reflect some naivete' about conditions in public school settings. Had they been restricted to a direct extension of Stenner's notions about information-based evaluation they might have proven more useful.

Conclusions: Data presented in preceding sections supported the following conclusions:

1. Self-awareness:

   a. Grade three and six: Comparison tests were not made. However, there is some evidence that use of the B.C.C.I. does have an effect upon student self-awareness.

    b. Grade nine: Significant changes were observed on some scales of the D.A.T. when the D.A.T./C.P.P. was used as the treatment. The criterion proved to be sufficiently valid. Additional study of this use of the D.A.T./C.P.P. is warranted.

2. Awareness of, and knowledge about, work:

    a. Grade three: Teacher training has a significant influence.

    b. Grade six: Intensive use of field trips and resource persons has a significant effect.

    c. Grade nine: Teacher training had no effect. The ATS-VI Demonstration, both singly and in combination with counselor interpretation, had a significant effect. Teacher and counselor use of the O.V.I.S. had no significant effect. Use of O.V.I.S. scores and the C.E.E.B./Decisions and Outcomes program, in combination, had no significant effect.

    d. Grade twelve: Student use of a Career Information Center did not affect their performance on the A.C.D. However, there is a great deal of evidence to suggest that a C.I.C. is a powerful treatment. More careful study of its effects is required.

3. Basic Skills: As expected, no significant changes were observed. The logic which related changes in basic skills to a very short term treatment is open to serious question.

4. Career Decision Competency: No significant differences were found on the criteria employed. However, this was not unexpected, as the construct is extremely complex.

5. Placement: The study included in this evaluation was difficult in that subjects were extremely difficult to locate. Additionally, it is likely that subjects used were the most difficult to assist, due to their expressed lack of career goals and interest in self-improvement. Among these subjects, there was little satisfaction with their present jobs or congruence with desired jobs, however, the subjects were not clear on what jobs they desired, which would make any placement service ineffective.

6. Expansion of job preparation opportunities: There has been a significant increase in this area.

7. Budget management: Excellent records were maintained. Judgements about the distribution of funds are left to the project sponsor.

8. Career Information Centers: These have proven to be one of the more important project outcomes.

9. Community resources: This resource has been carefully developed by the project and is receiving wide usage by teachers.

10. Staff development: The training program sponsored and conducted by the project has had a significant effect upon:

    a. Student outcomes;

    b. Use of community and other resources; and

    c. Use of career-related instructional strategies.

Generally, the project has effected a number of important changes in the education programs of the Great Falls Public Schools. The staff represent a major force in effecting change within the district, which has resulted in several useful and important program changes. These changes are evident in student outcomes.

One factor which serves to have a distressing lack of influence is counselor intervention. A careful study of the entire district counseling program would be useful in an attempt to identify what constraints are interfering with counselor effectiveness.

Recommendations: The following recommendations are based upon data presented in this report and upon general observations of the project.

1. A careful study of tests to be used as criteria for project outcomes should be completed. Project staff currently have sufficient experience with a variety of tests to select those which should be studied.

2. Selected project components should be described with sufficient precision and detail such that they may be readily transported to other settings.

3. Alternative funding, including local district funds, should be sought.

4. The role and use of counselors should be studied in an effort to increase the degree of effect they have upon the career aspects of student education.

5. Some thought should be given to designating an individual who has both the time and responsibility to coordinate vocational education offerings at the secondary level. This responsibility should include articulation of vocational education programs.

D. PROJECT OUTCOMES

1. Introduction

A rather detailed discussion of the developmental procedures to be employed by the project was presented in the first annual report. The model proposed there included three "Levels of Development." While these levels were not expected to be congruent with years of project operation, there is naturally some correspondence, along with some overlapping, between the two.

The general rationale was, in a linear and systematic fashion, to define components for a "transportable" model, design the specific aspects of each component, and then focus upon implementation of those components within the district. In many cases, it is impossible to maintain the linearity of this model. Consequently, design, development, and installation were found to interact in many cases. However, the criterion was successful implementation of the component.

Program outcomes, in relation to these considerations, are discussed below.

2. Component Development

Community Resource Center: This activity is perceived as one of the strongest and most beneficial activities of the program. Through this activity, teachers have been able to systematically, and rather vigorously, employ a resource that would not have been available without the project's support. The center has enabled teachers to heighten student awareness of career opportunities while simultaneously obtaining support for the career education program from the community. In this respect, the project has attempted to follow recommendations made in the first year evaluation report, i.e., have a sound program design before soliciting heavy support from the community.

Career Information Center: These centers have progressed from an idea to operating centers in a very short period of time. At least one of these centers (Great Falls High School) is staffed on a full-time basis. The centers are currently operational. However, some work remains in training students, counselors, and teachers in how best to use these centers.

Curriculum Program: Initial steps were taken to implement the career education scope and sequence prepared during the first year of the project. This included continuing work in developing instructional units, coordination of work experience and in-school activities, and greater involvement of counselors in all areas and at several levels.

Several important additions in the secondary curriculum were made. These included courses in (1) Sales and Sale Promotion and Management in the Distributive Education Program, and (2) a vocational education program in Agri-business. Plans are being made to investigate and possibly develop programs in Health Occupations and Home Economics. This latter program will focus upon wage-earning aspects of home economics as compared to traditional programs.

Staff Development: This project activity has proven to have significant benefit relative to expanding the concept of career education within the district. As staff become more fully aware of what can be done in career education, they begin to exercise more fully the services provided through the program. Evaluative data presented earlier in this report clearly show the relationship which exists between completion of a course in career education and frequency of use for career-related instructional strategies. In all likelihood, staff development activities of the project will have the greatest influence on achieving a multiplier for integration of career education concepts.

Counseling: Some progress has been made in effecting broader input from counselors into the career education program. However, there still exists a number of constraints within the district which must be addressed before the desired levels of counselor input will obtain.

There has been a significant increase in the extent to which counselors and teachers interact, jointly, with students. This strategy will most likely resolve many of the difficulties confronted.

Placement and Work Experience: The project staff is working with a Citizen Involvement Committee to develop a centralized placement service for young people. Since there are a number of agencies serving youth in Great Falls, the major objective is to consolidate placement efforts.

Cooperative work experience programs have been expanded, and plans have been developed for an extended day program which would permit work experience outside the cooperative programs. A job clinic was held at Great Falls High School for interested students to emphasize job seeking/job maintaining skills. Local business people assisted project staff.

3. Component Integration

As in all projects of this type, the level of district committment necessary to achieve wide spread integration of career education has been difficult to achieve. Career education must be considered in relation to all other district programs.

However, the following components appear to be fully integrated into on-going programs of the district:

- Community Resource Centers
- Career Information Center
- Teacher Developed Instructional Units
- Career-Related Media Support
- Cooperative work Program
- Work Experience Program
- Staff Development

4. Model Definition

During the first year a number of strategies were employed to identify the desired form of major student outcomes. During this past year, specific treatments were established and tested in an effort to identify those which would be most effective in achieving the desired type and amount of effect in each of the major outcome areas. It is expected that data derived from this year of project operation will serve to structure future project operations which will lead to full implementation of those strategies which have proven most effective.

Outcome areas addressed include: (1) Self-Awareness, (2) Work Values, (3) Work Awareness, (4) Obtaining Work, (5) Career Decision-Making Competence, and (6) Placement.

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E. RECOMMENDATIONS FOR FUTURE ACTION

If componets of the project are to be fully institutionalized prior to termination of the project effort, they must be fully integrated at the time of project termination. Therefore, major project emphasis will be upon integration of those components which have proven to be most effective in effecting curricular change, curricular articulation, and in changing student behavior toward desired goals.

Additionally, the project has a responsibility to fully judge and fully describe the operational context for those components which are to be included among transportable components. Remaining energies will be directed toward continued definition and development of program components.

Components for which integration will be sought include (1) Career Information Centers, (2) Community Resource Center, (3) the various placement activities, (4) staff development, and (5) district media support.

These components will generally comprise those activities which will ultimately become included in a transportable model. Therefore, description and judgement of these components will also be effected.

Continued developmental activities will focus upon:

1. Treatment delineation;
2. Articulation of vocational education and work programs;
3. Identification of alternative roles for counselors;
4. Identification of constraints to adoption of each counselor role identified;
5. Design of strategies to implement selected roles for counselors;
6. Development of a multiplier model to broaden the effect of staff development activities;
7. Operational definition of "life roles" using data bases established during years one and two of the project; and
8. Development of a public information program which will result in heightened awareness of the program among potential clientele.